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THE MATERIAL USED IN MUSICAL COMPOSITION

A SYSTEM OF HARMONY

BY

PERCY GOETSCHIUS

NEW YORK: G. SCHIRMER
BOSTON: BOSTON MUSIC CO.

The last* issue of
the Material in its
old form (2nd Version)

1912.

(*followed by a 13th edition
before issue of new Revision

TWELFTH EDITION

REVISED AND IMPROVED.

THE

MATERIAL

USED IN

MUSICAL COMPOSITION.

A SYSTEM OF HARMONY

DESIGNED AND ADOPTED FOR USE IN THE ENGLISH HARMONY CLASSES OF THE CONSERVATORY OF MUSIC AT STUTTGART,

BY

PERCY GOETSCHIUS, MUS. DOC.,

ROYAL WÜRTTEMBERG PROFESSOR.

NEW YORK: G. SCHIRMER.

LEIPZIG: FRIEDRICH HOFMEISTER.

ENTD STA. HALL.

1910

FACULTY OF MUSIC

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TO

PROF. DR. IMMANUEL FAISST

THIS BOOK IS INSCRIBED, IN TOKEN OF THE PROFOUND ESTEEM

AND GRATITUDE OF ITS AUTHOR.

Preface to the second Edition.

(Partly adopted from that of the first Edition).

The Author is not inclined to the sanguine belief, that such a subtle and imaginative Art as that of Composition can be acquired by those not possessed of the innate faculty, by simply studying from books. But it is certainly true, that even those who are born to compose are not exempt from the necessity of a careful training, systematic arrangement and studious development of their ideas. It is therefore essential that the musical student be guided in his studies by some Method in which the primitive laws of the Art (as instinctively recognized by Genius) and the subsequent experiences and inventions of distinguished minds (as transmitted through Classic productions) are comprehensively and truthfully recorded; and that Method which most lucidly, concisely and *systematically* imparts such information is the one from which the scholar will derive the greatest benefit. — In opposition to the still popular impression that such books as these are only written for the use of Composers, and that only those who intend or hope to become Composers ever need to study Harmony, the Author avers his belief that none of the many branches of musical discipline is so indispensable as that which treats of the Science of Music; and he therefore wishes to be understood as having prepared this Treatise *more particularly for the Musician in general, than for the very small minority of composing Musicians.* It is encouraging to observe, that, at the present time, when the Art of Music is becoming day by day more universal, and steadily advances to a higher rank than that of a mere accomplishment, its disciples are awakening to the conviction that something more is necessary than a mere knowledge of the names of the notes, and that it is presumptuous to profess to "interpret" what they, themselves, do not more fully comprehend. And it is also encouraging to note that, for this very reason, the desire to become acquainted with the hidden beauties, and to understand and follow the inner workings of the Art, is becoming of late more eager, and the study of Harmony and Composition is being prosecuted with more earnestness than ever before. But the Author's experience tends to the conviction that the necessity still exists for a work which, by maintaining a medium between

the extremes of too superficial, or needlessly profound treatment, will prove an efficient and *entertaining* guide through the difficulties and subtleties of the Science of Composition. The desire to contribute in some degree towards meeting this want, has been the Author's incentive in preparing this Treatise.

The scholars in whose hands this book is to be placed, are assumed to have *completely* mastered all the elements of Notation; to be reasonably expert in Piano playing,* and in reading at sight (for which the easier Sonatas of Mozart or Haydn may be offered as tests); and to be somewhat familiar with current Classical Literature. If this is not the case, they are urged to devote a few months to the acquisition of this indispensable knowledge, before commencing Harmony; for *neither from this nor from any other book can the study of Composition be successfully pursued, by any scholar whose attention is still partly engrossed by the Rudiments of Music!*

This Method of harmony is based upon the Method of **Prof. Dr. Immanuel Faisst**, for a detailed account of which the Author is indebted to the interest and kindness of Dr. Faisst himself.**

The present Author's knowledge of Harmony was obtained solely through this channel, and he takes pleasure in avowing that what he has since learned is due to the influence of Dr. Faisst's incomparable mode of instruction.

But in the preparation of this book the course of instruction received by the Author has undergone many, in part radical, modifications. It was necessary to adapt it to a style of teaching and a manner of study in which English-speaking nations naturally differ from the German: The order and division of Subjects have been slightly altered: An entirely new collection of Examples and Exercises (excepting such as bear Dr. Faisst's name) has been invented: In carefully investigating doubtful questions, and pursuing original researches to a satisfactory issue, older views have been changed or relinquished, and many new ones advanced. Chief among these — as defining the main stand-point assumed in this Method in distinction to all others, and as indicating the source from which the laws of harmonic action, and logical tests of euphony are deduced — are paragraphs 12a—f, 24, 48—50, 51, 90—93, 165a—f, 220a—g, 211. The Author lays claim, furthermore, to the originality of the *treatment* of the Rules of Melody (§§ 9—13); of Part II, Divisions *C* and *D*; of Extraneous Modulations

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* The reasons for adopting the Piano-forte as the most convenient medium for the practical study of Harmony, are given in the course of the book.

** See the following Preface

(§§ 280—289); of §§ 309—312 (Progressions of the Chord of the Diminished Seventh); of Part III, Section 5th (Harmonizing of Melodies with Modulations); of § 337; of Part IV, Section 4th; of § 383; of Part V, Section 2nd; and of Appendices A, B, C and F. —

The present completely re-written Edition differs from the first one in the following respects.

The different subjects of study have been more distinctly and methodically systematized; the explanatory notes and illustrations are more copious, while many intricate or speculative points have been either omitted altogether, or materially simplified; the Exercises, also, have been made easier, so that every ordinarily gifted scholar may have the gratification of correctly solving them, with a fair amount of application and patience; and finally, three different kinds (sizes) of type have been adopted throughout, by which the scholar will be guided in his choice of a more or less comprehensive and severe course of study. The *smallest* type has been used for exhaustive explanations, or matters of general information, and can therefore be *passed by*, in the case of such pupils as deem them unnecessary, or who may chance to be in haste with their studies. What is printed in *large* type, on the contrary, is absolutely essential for every scholar, and must be thoroughly studied. — The Course of Study is divided into Lessons (weekly, or semi-weekly) in such degrees as the Author has found to be most convenient in his own practice; but it is left to the judgment of the teacher to modify this division as occasion prompts. It will oftener be found necessary to devote the time of two lessons to one alone, than to merge two lessons in one: haste is of little avail in the study of Harmony. Each lesson terminates with an Exercise, or a set of Exercises, and a synopsis of the fundamental principles of the subject under treatment. The Author recommends working out *all* the given Basses and other Exercises, upon the ground that "practice will make perfect". But here, also, omissions may be made. The adoption of the given Positions (upper figures) facilitates the solution of the Basses very materially, of course, and they are really intended only for the use of weaker scholars. Those who are ambitious to profit most by the given Exercises will *simply ignore all such auxilliaries*, *i. e.* will copy out the given Basses without paying any attention to the upper (Position) figures. — The Fundamental principles should be memorized. —

The references to other paragraphs (which may appear at first glance unnecessarily profuse) have been made with the studied purpose of impressing certain points more deeply upon the scholar's mind, by dint of frequent repetition. Therefore the scholar is required to make conscientious use of them, despite the slight interruptions they may cause. — In the other references (to other works) the Author has limited himself as much as possible to such Compositions as are accessible to every scholar, and, with very rare exceptions (in favor of some particularly striking examples), to Piano-forte music alone. The printed

examples, of which those not otherwise marked are *original*, are the more pointed illustrations of the matter in question, and are so copious that the references, if unobtainable, may be dispensed with. —

This present volume embraces nothing more than the ordinary **Material** employed in Composition. The Author still hopes at some future time to complete the Course of Study, in a Second volume devoted to the consideration of **Musical Form** and **Counterpoint.**

THE AUTHOR.

Stuttgart, May 1889

Preface of Dr. Faisst.

The Method of Harmony upon which the present work of Mr. Percy Goetschius (published with my assent) has been based, was originally prepared by me in 1847, for the purpose of instruction in a musical Institute; and was subsequently — certain parts repeatedly — revised. After having used it in this manner for a period of ten years, the establishment of the Stuttgart Conservatory of Music, and my acceptance of the proffered position among its faculty, gave me occasion for new and more extended application of my Method, by reason of which it naturally grew more and more complete; albeit I gave the lessons without the aid of manuscript notes, and extemporized the Examples and Exercises directly upon the blackboard. — In one of these Conservatory-courses, my system of instruction was written down as accurately as practicable in text and notes by a scholar who was afterwards engaged in my stead as teacher of the branch in question, and who gave the lessons according to his manuscript copy. Through a similar medium, Mr. Goetschius, to whom I subsequently had the pleasure of imparting instruction personally in the higher branches of Composition, came into possession of this part of my Method. —

As I have been unable as yet for lack of time, and may possibly never find time, to elaborate this branch of study consistently with my wishes for publication, I would not oppose the Author of the present work in his intention of preparing a System of Harmony, which, though based upon the Method which I have applied, contains various modifications and original additions. But, on the other hand, it may be no more than just that I should, in this place, support my right of invention and application to such subjects and such modes of treatment as, to the best of my knowledge, distinguish my Method from prior modes of Instruction; especially in view of the possibility that parts of this Method which are peculiar to myself, might later be adopted in other — perhaps even German — didactic books. —

The points which I believe I have originated, are as follows:

The adoption of an "absolute" figuring for all the Chords. That is, a designation in numbers, which, without the necessity of a written Bass, indicate the species of the Chords and their exact situation in the key; not only in reference to their Roots, but also to their denomination (as Triad, Chord of the Seventh or Ninth), and to the grade of Inversion, — for illustration, $\bar{I}_1$, ${}_0\overset{9}{V}_3$. Further, the noting down of Exercises in numbers according to this system, to be worked out in different keys;

The abbreviated denomination of all the Chords, according to the numbers used in this "absolute" figuring; *e. g.* the Two-seven-one;

The regard paid to the eminent influence, which in all Chords (above all, in the Concords) the condition of the Soprano exerts upon the admissibility and effectiveness of the Chord-progressions; and, in consideration of this influence, the investigation and judgment of all the diatonic harmonic-progressions, with regard to every possible Soprano-position; furthermore, in the same connection, inciting and guiding the scholar to a melodious progression of the Soprano, in every kind of Exercise;

The institution of rules for voice-progression, which are not limited to a succession of two tones, but apply to the connection of a protracted series of tones;

The application, throughout, of each part of the harmonic material, in a threefold manner:

a) in working out figured Basses;

b) in the invention, by the scholar, of original Phrases and Periods; in both cases with special regard to the acquirement of these simple, elementary forms in regular construction, — for which reason, the suitability of the momentary chord-material for Semicadences is also indicated; c) in harmonizing given Melodies, chiefly in these elementary forms, or in other related forms proceeding from them;

The determination of the relations existing between the laws of rhythmic progression, and the prolongation or change of Chords and Bass tones;

Many rules of voice-progression for special combinations of Chords; particularly in reference to covered, interrupted, and oblique consecutive octaves and fifths;

The distinguishing between different kinds of parallel fifths, according to their size, and the condition of the voices;

Precise definition of the harmonic relations and general use of the different $^6/_4$ Chords of the key;*

Thorough exposition of the free resolutions or progressions of Discords, and their use; also the free resolutions of Suspensions;

Regulations respecting the practical application of the diminished Triads, and their Inversions; of the Chords of the Ninth, and Inversions; the Chord of the Seventh upon the 7th step in Major, with its Inversions; of the Altered and Mixed Chords;**

The derivation of the Chord of the Seventh upon the 4th step, from the Chord of the Ninth upon the 2nd;

The distinction between, and separate treatment of, Diatonic Modulation (based upon the fundamental principle that certain Chords are *common* to different keys) and Chromatic or Enharmonic Modulation; Diatonic Modulation to remote keys, direct and indirect; precise exposition of the different chromatic Chord-progressions,*** and their modulatory significance;

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* Dr. Faisst distinguished between strong and weak Six-four Chords. The present Author determines their relations and use differently.

** Dr. Faisst regarded the Altered Chords as borrowed from a foreign key.

*** This the present Author has very considerably condensed.

The Author.

Rules for determining the admissibility of False-relations;

Detailed treatment of Harmonic and Mixed Figuration;

The transition from the harmonic (homophonic) style of writing to the polyphonic, by means of inharmonic tones. —

All these characteristics, which I believe to be peculiar to my Method, have been adhered to with more or less fidelity by Mr. Goetschius in the present work. — But, while it would be groundless to regard each individual point in the presentation and treatment of these subjects in this book as proceeding from me, (inasmuch as Mr. Goetschius has deviated in many respects), it would be still less just to overlook what he has done to complete certain parts of my Method, and present it in a fitting shape for practical instruction; besides the addition of those parts, in reference to which he in his Preface lays just claim to having advanced original views, the significance of which will not be denied even by those who are unable promptly and easily to appropriate them.

May this book then, which has been prepared with so much intelligence and assiduity, prove to be a successful guide to very many, in their musical studies.

Dr. IMMANUEL FAISST.

Stuttgart, October 1882.

Explanation of signs.

The reference-figures (usually in parenthesis) apply to the *paragraphs*, unless their reference to the *Examples* is explicity indicated by Ex. — Care must be taken not to confound these figures. —

⊖ signifies "bad"; ? or ?? doubtful. —

The Roman numerals I, II etc. indicate Triads ("Common-chords") of which the corresponding Scale-step is the Root. When a 7 or 9 is attached *above*, it signifies a Chord of the Seventh or Ninth. When 1, 2 or 3 is attached at the *lower* right-hand corner, it signifies the corresponding Inversion; and o signifies Incomplete, *i. e.* without the Root. Thus: $\hat{V}_2$ = the Chord of the Seventh on the fifth step, in second Inversion. — When an Accidental is attached, it signifies that the Chord is *Altered*. —

The figures 3, 5, 8, 7 or 9 *above* given Bass notes refer to the corresponding Interval of the Chord (*i. e.* the "Position"), and are reckoned from the *Root*. When + or − are attached, they signify high and low Position, respectively. — The figures *below* the given Bass notes agree with the traditional "Bass figuring", and indicate the upper intervals from their *Bass note*. A line after a figure (or alone) (*e. g.* 6 —) signifies that the note in question, or the former Chord, is *held*. When a slur ⌣ *precedes* a Bass figure, it draws the Chord back to the preceding Bass note. Only used in Suspensions). When a figure is crossed through (6) it signifies that the corresponding interval is *raised*. Accidentals in the figuring refer to the figure which *follows*. A *solitary* Accidental refers to the figure 3. —

Single Capital letters in the Examples in Modulation refer to the corresponding *Major* Keys; small letters to the *Minor* Keys. —

Org.-pt. = Organ-point. —
S. = Suspension. —
S. Ch. = Suspension-chord. —
A. or Ant. = Anticipation. —
A. Ch. = Anticipating-chord. —
) = Simple Neighboring-note. —
♦ = Unaccented Passing-note. —
✕ = Accented Passing-note. —

} in Part IV.

PART I.

DEFINITIONS AND RULES.

1. The study of musical Composition embraces the consideration of the three essential factors of Music, namely: **Rhythm, Melody** and **Harmony.**

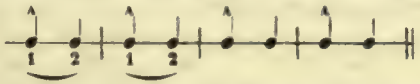
Rhythm.

2. Rhythm is the principle of motion, and treats firstly of the *division* of the time required for the expression of a musical idea into *absolutely regular and equal* Units, of which the most convenient and commonly adopted representative is the "Beat". Secondly, Rhythm treats of the *grouping together* of a certain number of these Units or Beats in symmetrical Measures (Bars). This grouping is effected by means of a regularly recurring emphasis (Accent), laid upon the *first* Unit of each group.

The Beats are absolutely similar in *size* or duration but differ in *quality*, some being heavy and others light. This is the most essential principle of Rhythm, as it establishes a distinction between the beats, and gives the otherwise monotonous and meaningless series of similar strokes a recognizable, plastic form.

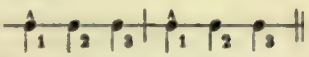
3. a. The rhythmic groups consist of either **two** or **three** Units or Beats, and constitute the Simple Measures or Bars of written music. When there are **two beats in a group** (heavy and light beats in regular alternation) the rhythm is **Duple:**

Ex. 1.



When **there are three beats** in a group (an irregular alternation of one heavy and two light beats) the rhythm is **Triple:**

Ex. 2.

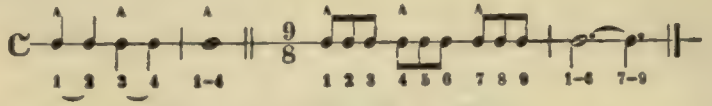


The following kinds of Time are examples of ***simple*** groups or measures, in Duple and Triple rhythm: $\frac{2}{4}$ (*i. e.* a group of *two* units of the value of Quarter-notes); $\frac{3}{4}$ (a group of *three* units of the value of Eighth-notes); $\frac{2}{2}$ or ¢ (alla breve); $\frac{4}{4}$; $\frac{3}{2}$ etc. —

b. *Compound* measures are combinations of these simple groups. For instance, two groups in Duple time: $\frac{2}{4} + \frac{2}{4} = \frac{4}{4}$ or C (sometimes called Quadruple or Common time); or $\frac{3}{4} + \frac{3}{4} = \frac{6}{4}$; $\frac{3}{4} + \frac{3}{4} + \frac{3}{4} = \frac{9}{4}$; $\frac{4}{4} + \frac{3}{4} = \frac{7}{4}$ (not to be confounded with $\frac{7}{8}$!) etc. —

Simple measures have only one Accent, Compound measures have an Accent for each rhythmic group that they contain:

Ex. 3.

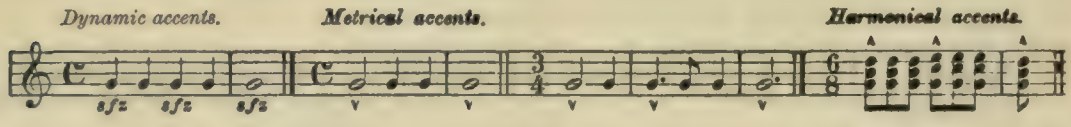


c. The only difference between simple and compound time is, obviously, the number of *Bar-lines*. — The first accent of a compound measure is the strongest, as the exponent of the *first* of the two or three groups which compose the measure, and is called the *Primary* accent; the other accent or accents are *Secondary*. —

Modes of Accentuation.

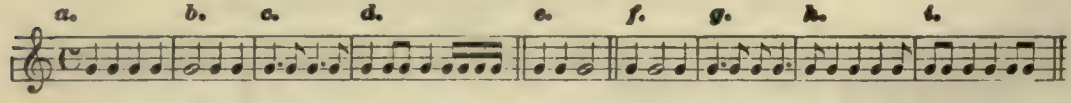
4. a. The accent which falls upon the first unit of each group is called the Natural or Grammatical Accent, and is fixed by counting. But an *arbitrary* stress, or emphasis, may be imparted to *any* individual beat, for diversity of effect. These accentuations are called Rhetorical or Artificial, and may be produced as follows; 1st, *dynamically*, by simple emphasis; 2nd, *metrically*, by a tone of longer duration, representing the sum of two or more beats, or fractions of beats; and 3rd, *harmonically*, by a change in the combination of tones. Thus

Ex. 4.



b. Those rhythms are most natural, comprehensible and agreeable, in which the dynamic and metrical accentuations coincide with the *natural* accent, — that is, fall upon the first unit of a rhythmical group; if not constantly, at least for such a period, and in such frequency, as to render the rhythmic intention unmistakable.

Ex. 5.



The measures a, b, c, d, are perfectly regular, and satisfactory in their effect; at e, the primary and secondary accents are exchanged. At f, g, h, i, the metrical accent does not coincide with the natural one, to the detriment of the latter; such rhythms as these, in which the metrical accentuation is violated (i. e. in which *heavier* notes occupy *lighter* beats, or fractions of beats are called *Syncopated*. See 353. Such irregular rhythms are undeniably effective, *when understood*. In order to be comprehended as irregularities, they must be used in connection or alternation with sufficiently marked *regular* rhythm. —

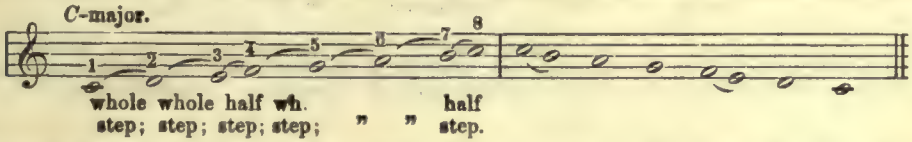
Melody.

5. Melody is *any succession of single tones*, arranged in natural and logical order. It is commonly called the Air or Tune, and is the most important element of musical composition (at least, from a certain stand-point), as it constitutes the continuous *Motive* or *Thread* which indicates the *Design* of the tone-structure, and to the support and development of which the elements of Rhythm and Harmony are subservient.

The Scale.

6. One of the simplest, and at the same time most complete and gratifying, and consequently most common tone-successions is the so-called *Diatonic Major Scale*, consisting of 7 (or 8) whole and half-steps (generally called whole tones and semitones) in the following order:

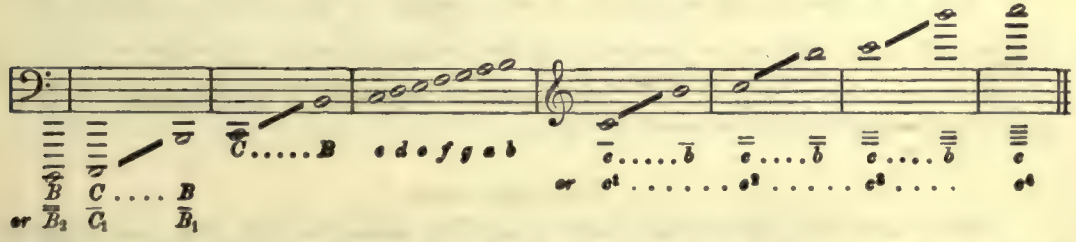
Ex. 6.



The reasons for this irregular and apparently singular arrangement of whole and half-steps, and the definition of these distances, for which no ordinary standard of measurement can be used, will be found in 24. —

The designation of these tones by ***Letters***, in the different registers, is as follows:

Ex. 7.



7. a. The pre-eminence in this Scale (*C*-major) of the letter *C*, and the importance of its position as beginning (*Source*) and end (*Object*) of the succession, invest it with a superiority over all its companions, which is implied by its name **Tonic.** (Also called Key-note).

b. The second and third in importance in the diatonic Scale are: the 5th step,*1) which is called the **Dominant** (ruling, governing); and the 4th step,*1) which, occupying the same relative position *below* the Tonic that the Dominant does *above* it, is called the **Subdominant** (not "*below the Dominant*", but "*the Dominant below*"!). These three notes, **Tonic, Dominant and Subdominant,** are the *principal members* of the Scales, — the rest are *subordinate*. See 23.

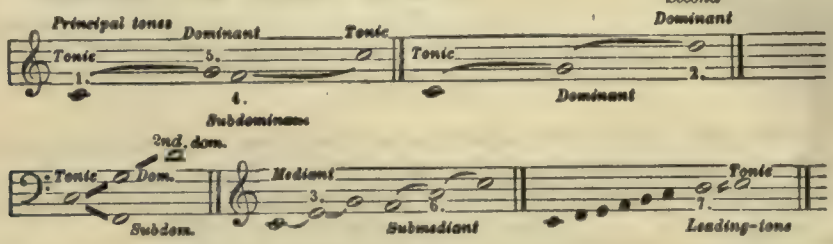
c. The 2nd step,*1) which extends and transfers the relationship of Tonic-Dominant to the Dominant itself, is called the **Changing-Dominant, or Second Dominant.**

*1) The steps (or "degrees") of the Scale are always numbered *upward* from the Tonic.

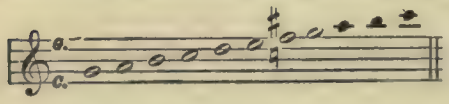
d. The 3rd step is called the **Mediant,** because it lies in the middle between the Tonic and the Dominant; and the 6th step, which lies half-way between the Tonic and *Sub*dominant, is analogously termed the **Submediant.**

8. a. The 7th step of the Scale is called the **Leading-tone, because it almost invariably leads into the next higher Tonic, thus completing the Scale, and leading the active Melody and Harmony back to their Source.**

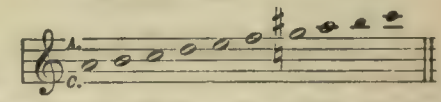
Ex. 8.



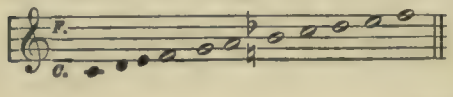
b. A proof of the importance of the **Leading-tone** in completing and *characterizing* its Scale is deduced from the comparison of the Scales with one another, as follows: Take the white-key Scale (*C*) from Dominant to Dominant, and compare it with the Scale of *G*-major:



the only point of difference is the black key *F* ♯ — the Leading-tone, and therefore characteristic tone, of the Scale of *G*. Compare the white-key Scale with *A*-minor



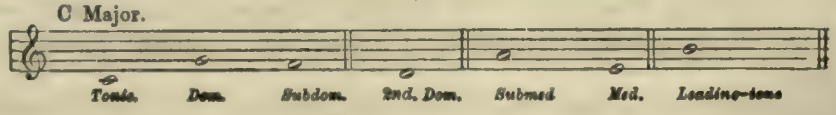
the point of difference is the black key *G* ♯, the Leading-tone of *A*. The comparison with *F*-major



proves the significance of the *C*-major Leading-tone itself

Exercise one.

Write out every Major Scale, and attach the name to each Step, according to the following model:



Fundamental principles.

There are only two species of Rhythm: Duple and Triple. —
The species of Rhythm is defined by the Accent. —
Melody is the most important element of Music. —
The Tonic, Dominant and Subdominant are the Principal tones of the scale. —
The Leading-tone is the characteristic tone of the scale. —

Rules of Melody

9. It is impossible to establish definite laws for the mechanical invention of a Melody, because this pre-eminent quality of Music is the mysterious product of many and various natural principles, whose subtile workings and mutual relations must be perceived by ***instinct*** rather than by reason. Nevertheless, there are certain *general* rules with which the beginner ought to be made acquainted, — which serve as a guide for the scholar in his studies and for the critic in his judgment of Melody.

The ability to conceive good and striking Melodies is properly regarded as an infallible sign of talent, for in this a composer's innate sensibility to the natural laws upon which musical Art is founded evinces itself most directly. Here Instinct, in unconscious obedience to these natural laws, acts spontaneously, without the hindering coöperation of the Mind. The powers of the Mind are *subsequently* enlisted, for refining the more or less crude emotional effusions. The manner in which the greatest Masters (especially Beethoven and Bach) are known to have labored to improve their melodies and forms, and, in short, every truly great work of Art, affords ample proof of the necessity of *intellectual* aid, even in the case of "inspirations".

10. The general requirements of good Melody are: smooth and natural undulation; rhythmic variety; marked and interesting character; definite and symmetrical design; and sufficient inherent *harmonic* essence to express a distinct and complete idea even when unaccompanied by other parts.

11. Perhaps the most important necessity of Melody (as indeed of every factor of every Art) is **variety.** But, just as rhythmic variety (obtained by notes of different length or value) must not be instituted to the detriment of the fundamental Rhythm (as seen in Ex. 5, f. g. h.), so ***melodic*** variety (consisting in difference of interval and direction) should not be sought at the cost of fluency, unity and compactness.

Hence the important rule, that the Melody, *after a wide skip*, should usually turn and proceed in the *opposite direction.*

But much depends upon the ***harmonic*** nature of the skip, and upon the Rhythm, as will be seen hereafter.

Ex. 9.

*1) The sign ⊖ signifies *"bad"*.

---

12. Another very important rule of Melody is that which regulates the ***direction*** in which certain tones must move, according to their ***inherent*** inclination (as defined by their relation to the Tonic), or in fulfilment of tendencies *acquired* through their relations to other simultaneous (or adjacent) tones.

a. The seven tones of the Scale or Key may be divided into two classes, as follows. into **Active** tones, which possess a pronounced inclination to proceed in a certain direction into certain other tones; and **Inactive** tones, which possess no melodic tendencies themselves, but represent the aim and fulfilment of the tendencies of the others.

Ex. 10.

b. The Inactive tones, which, as the scholar will readily perceive, represent the harmonic fundament of the Key, are scientifically defined as the "Harmonics" or harmonic "Attendant-Tones" of any single fundamental tone the Generator), — assumed in musical theory to be the Tonic of a scale. The "Harmonics" arise from aliquot divisions (½, ⅓, ¼ etc.) of the vibrating body which, at its full length, produces the fundamental tone. (See 22).

Ex. 11.

The first Attendant-tone is the reproduction or corroboration of the Fundamental, in the Octave; the second tone is its Fifth (Dominant of the Scale); the third again reproduces the Tonic; the fourth is its Third the Mediant of the Scale); and the fifth one reproduces and confirms the Dominant. Up to this number the Harmonics, which are so distinct as to be easily detected by a practiced ear, appear in the natural Major Scale as Inactive tones. The sixth Attendant-tone does not appear in the Scale, and the seventh one again corroborates the Tonic.

It is easy to understand why these tones, the 1st, 3rd, and 5th steps of the Scale, which proceed so naturally and directly out of the Tonic, should share its nature as Inactive centre (or Axis) of the Key, around which the other, Active, elements of the Scale operate, and towards which they tend as being their point of rest.

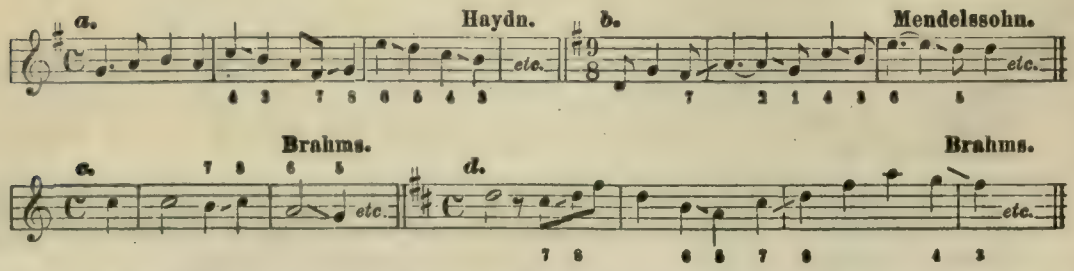
c. The tones which *lie between* these Inactive steps are Active (*i. e.* the 7th, 6th, 4th, and 2nd — Ex. 10), and the tendency or *direction* of each one is defined *by its proximity* to an Inactive tone; being naturally most strongly attracted by that Inactive tone which lies nearest.

d. The proximity of the 7th step to the Tonic defines the tendency of the former upward. The 6th step, lying nearer to the Dominant than to the Tonic, proceeds downward to the former. The proximity of the 4th step to the Mediant defines its tendency downward. The 2nd step, which lies equidistant from Mediant and Tonic, has but a slight tendency, and may proceed downward or upward, to either. Thus:

Ex. 12.

This rule is illustrated in the following examples:

Ex. 13.



e. These are the *natural* or inherent tendencies of the four Active tones of the Scale. They may, however, be counteracted by approaching them from the *opposite direction*. In the descending diatonic Scale (Ex. 6) the 7th step is *pushed down* from the 8th; and in the ascending Scale both the 4th and 6th steps are *pushed upward* from below.

Moreover, an *artificial* tendency or impetus may be imparted to any step of the Scale, Active or Inactive, by the following means.

1. By approaching it diatonically from either direction in *rapid rhythm* (139; 159);
2. By so arranging the accompanying notes that it becomes a Dissonance (164); and
3. By chromatically raising or lowering it (246a).

In this way the tendencies of the Active tones may be counteracted, or intensified; and the Inactive tones may acquire tendencies in either direction.

Ex. 14.

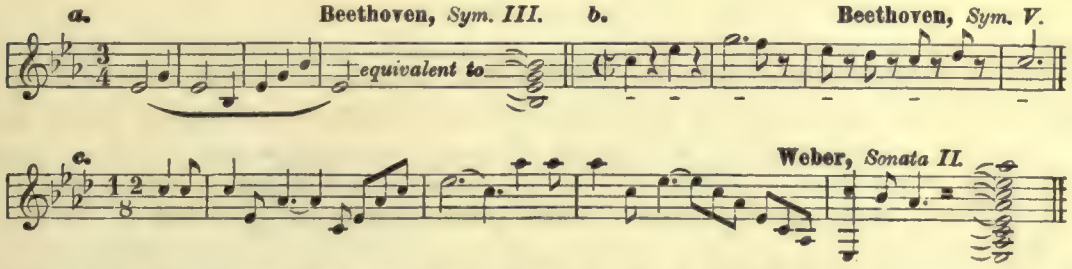
f. **The *natural* tendencies are the strongest, and should therefore generally be respected in preference to the acquired tendencies, whenever there is a possible choice; especially in prominent parts. —**

---

13. **Besides these special rules of melodic progression, there are a few other melodic characteristics which may be regarded as favorable if not essential features. Thus:**

a. **The melodic succession is frequently based upon some *harmonic* combination. This mode of construction conduces to the strength, concreteness and unity of the Melody.**

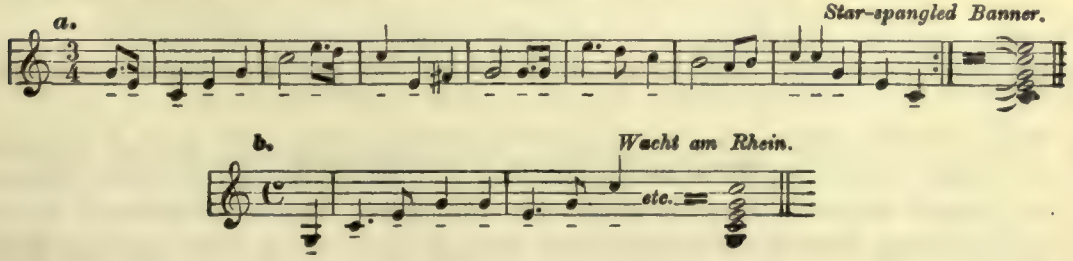
Ex. 15.



(This is a characteristic of the classical period, represented by Haydn, Mozart and Beethoven, but, unfortunately, fast disappearing before the stormy inroads of modern "originality"; there are but very few living composers who endeavor to retain this logical, transparent and satisfying style of melodic conception. Rubinstein belongs to this rare class).

It is often employed, on account of its *concentrated* character, for the expression of vigorous, bold and lofty sentiments; as in patriotic songs, national hymns, and the like.

Ex. 16.



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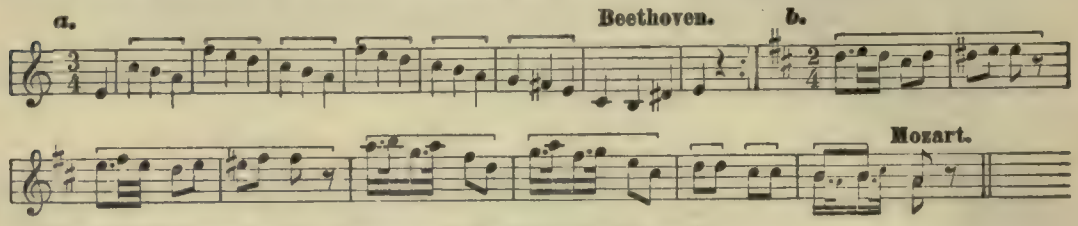
b. A *Sequence* is the repetition of a certain melodic or rhythmic figure upon a different step. Melodies which contain Sequences are consistent in design, and symmetrical.

Ex. 17.



(This melodic formation is a characteristic feature of Raff's music.)

Harmony.

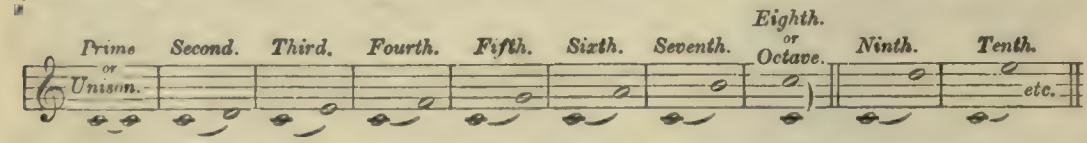
14. **Harmony**, in its narrowest sense, is the *Combination* of single musical tones; in its widest sense, the *Succession of such harmonies.*

15. The combination of *two* tones constitutes an **Interval,** — a term which must be applied not only to the "Space" between the tones, but more particularly to the "Relationship" established by joining them together.

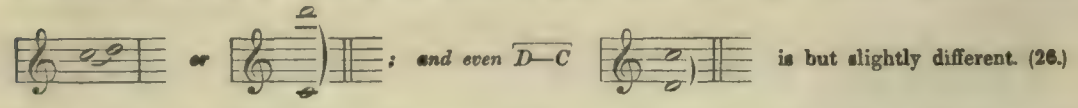
Intervals.

16. Intervals are always counted from the lower note *upward*, *as the diatonic Major Scale goes*, and are determined by the number of steps of the Scale *included* by the two notes.

Ex. 18.



The first eight are *simple* intervals; the last two and all that follow (beyond an octave) are *compound* — consisting of an octave and a second, octave and third, etc. Such intervals are always reduced to *simple* ones, and called, with omission of the octave, simply "Second", "Third", etc.; for, as already observed, these terms indicate strictly the *relationship* between the *letters*, which is always the same without regard to distance, as long as the letters do not exchange places. Thus, C—D is a "Second", whether written



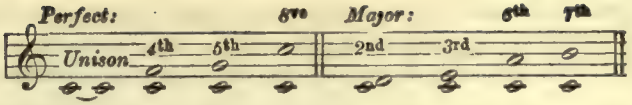
or ; and even D—C is but slightly different. (26.)

17. These intervals, which follow the natural diatonic Major Scale, and therefore represent the simple *Scale-relations* of the several steps to their Tonic, may be called **Natural** or Diatonic intervals. They are divided into two classes, namely: *Perfect* and *Major*.

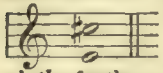
The Unison, Fourth, Fifth and Octave, *from the tonic of any Major scale*, **are called Perfect.**

The Second, Third, Sixth and Seventh from the Tonic are called Major.

Ex. 19.



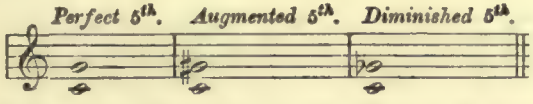
That is to say: the interval *e–f* (for instance) is a ***fourth***, because *f* is the 4th letter or step in the Scale of *C*; and it is a ***perfect*** fourth, because it exactly agrees with the natural Scale of *C*, and because "perfect" is the term used to qualify the Natural or diatonic 4th. The interval *e–c*♯



would be counted along the Scale of *E*, and, as *c*♯ is the 6th letter from *e*, it is a ***sixth***; furthermore, a ***major*** 6th, because it exactly agrees with the Scale of *E*, and because "major" is the term applied to the Natural sixth.

18. **a. A Perfect interval, when *extended* by an accidental (♮ ♯ 𝄪), the letters remaining the same, becomes Augmented; when *contracted* by an accidental (♮, ♭, 𝄫), it becomes Diminished. For example:**

Ex. 20.

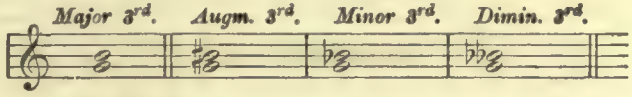


It is obvious that, if the *letter* were to be changed, the *quantity* of the interval would be altered Therefore the *g*♯ (Ex. 20) must not be regarded as equivalent to *a*♭, nor *g*♭ to *f*♯!

b. A Major interval, when extended by an accidental, becomes Augmented, precisely like the perfect intervals. When contracted it becomes, not diminished, but Minor (N. B.!).

c. A Minor interval when contracted becomes Diminished. Thus:

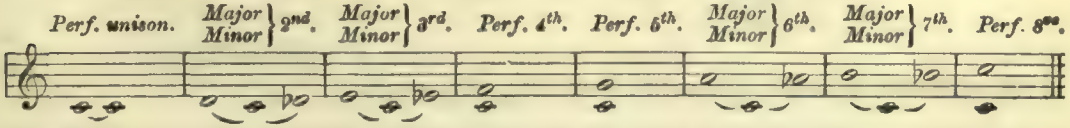
Ex. 21.



From this it appears that the ***perfect*** intervals become diminished by ***one*** contraction, whereas the ***major*** intervals must be contracted ***twice*** to become diminished.

19. Why the perfect intervals are so called will be proven in 25. The other intervals, unlike these, admit of modifications which do not so seriously affect their harmonic quality but that they constantly appear in two distinct dimensions, differing by a chromatic half-tone, and called respectively *Major* ("greater") and *Minor* ("smaller"). As has been shown, it is the *Major* dimension which agrees with the Scale of the lower tone, as Natural interval.

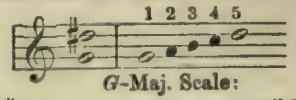
Ex. 22.



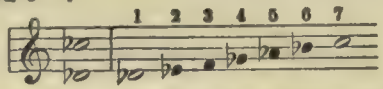
How the augmented and diminished intervals are obtained from these is very obvious.

---

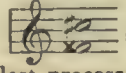
20. In determining the quantity and quality of a given interval, the scholar must always start out from the only infallible criterion, the ***diatonic Major Scale*** (16); and erect it upon the ***lower*** of the two notes. The step, or letter, of the Scale, occupied by the upper note, gives the *quantity*. If the

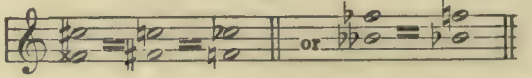
upper note corresponds ***exactly*** to the scale in question, the interval will be ***perfect*** or ***major***, these technical terms being synonymous with "Natural", or "as the Scale runs" (17). If, however, the upper note differs chromatically from the Scale, the interval will be ***minor***, ***augmented***, or ***diminished***, according to the alteration (18). For example: 

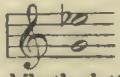
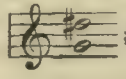
G-Maj. Scale: quantity, a **fifth**: the Scale-note being changed, however, from *d* to *d*♯, the natural "perfect 5th" has been increased to an "**augmented** 5th".

And again: 

(*D*♭-major Scale), quantity, a **seventh**; being altered from *e* to *e*♭, the natural "major 7th" has been decreased to a "**minor** 7th". —

In a case like the following:  , where the major scale of the lower note is impracticable or inconvenient, the simplest process is to ***cancel*** an equivalent accidental from each note. Thus:

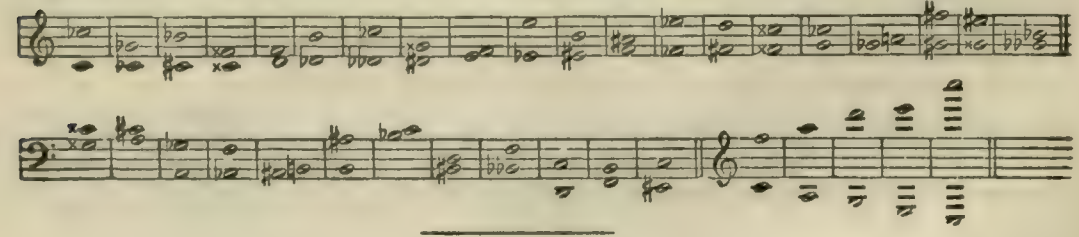


The mode often adopted of determining the quantity and quality of an interval by the number of included *half-tones* is not only too mechanical, but really unreliable; for the same tones may be written in different ways, as different intervals (*i. e.* harmonic relationships), without their undergoing any change in actual distance apart. For illustration:  is equal to eight half-tones, and so is  ; but the former is a minor 6th in one Key, while the latter is an augmented 5th in another.

Exercise two.

A. **Erect** the Dimin. Octave, Minor Second, Dimin. Third, Perfect Fourth, Augm. Fifth, Minor Sixth, and Dimin. Seventh, upon each of the Notes E, A, D, G, B, F♯, C, G♯, F, C♯, D♯, and B♭: and the Augm. Octave, Major Second, Minor Third. Dimin. Fourth, Perf. Fifth, Augm. Sixth, and Min. Seventh, on the notes D♭. G. C. F. B♭. A♭. D. E♭. G♭.

B. **And determine the Names of the following Intervals**



Fundamental principles.

After a wide skip the Melody turns. —
The 7th step of the scale proceeds upward. —
The 6th and 4th steps proceed downward. —
Intervals are counted upward. —
The *perfect* and *major* intervals agree with the diatonic major scale. —

Tone-relations.

21. **The vital principle of musical Art is Tone-relation.** Every combination, every progression, every obligation is based upon and defined by the correlation of the tones. A solitary tone has (ordinarily) no more meaning than a single letter or character of speech has; both acquire a signification only upon being associated with other characters, whereby a certain *Relationship* is established, involving mutual obligations and evolving action.

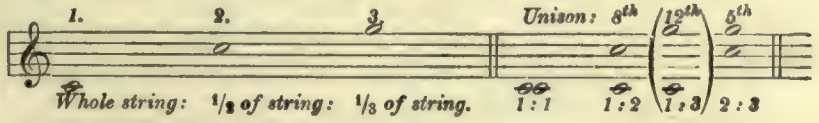
22. **a.** The classification of the intervals and the determination of their various grades of intimacy is not a matter of opinion and conjecture, but can be undertaken with mathematical exactness, because each tone represents a definite *number*. The sensation called "tone" is produced by the action upon the ear of a rapid succession of regular *sound-waves*, as they are called (or atmospheric pulsations . These sound-waves are generated by the forward and backward vibration of an elastic body at an inconceivably high rate of speed. A pianoforte-string which makes 261 full pulsations in a second of time produces the sensation (or tone) we name c^1 — the middle *c* of the Pianoforte.

b. Another string (say a violin-string) also vibrating 261 times in a second will, of course, produce exactly the same tone, representing the interval called "Unison" with the first one. This mathematical proportion of 261 : 261 or 1 to 1 need not be regarded as an "interval" at all.

c. Another string of exactly *half* the length of this one will vibrate (all things being equal) exactly twice as fast, or 522 times a second, and will produce the next higher *c* (c^2). The simplicity of this division of the first string, exactly in the centre, and of the mathematical proportion of the two velocities to each other, 261 : 522 or 1 to 2, is a self-evident proof of the simplicity or intimacy of this tone-relation (the Octave). The tones *must* blend and produce consonance, because there is no conflict between sound-waves which enter the ear together at the rate of one to two.

d. This interval, the octave, is of no great use in active Harmony, as it merely alters the *register* of what is practically the same tone, — so complete is the agreement. In order to obtain a new tone, another division of the string must be made, which will result in the *next simplest* mathematical proportion, namely 1 to 3. One-third of the first string (c^1) will vibrate three times as fast as the whole string, or 783 times in a second, and produce the tone g^2.

Ex. 23.



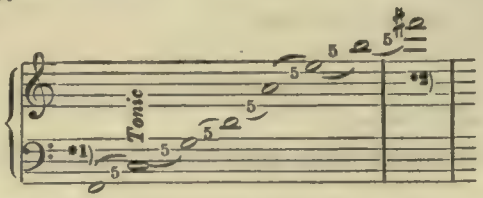
23. From these simple experiments the following facts are deduced:

The Unison and Octave are the most *simple* and intimate tone-relations, but the perfect fifth is of the greatest significance in Harmony, as it represents the *simplest mathematical proportion* and consequently the *most intimate relation which can exist between actually* different *tones*, and therefore constitutes the basis of all tone-combination. The perfect fifth is the standard of measurement in Harmony, and may be called the Harmonic Degree.

24. The group or family of tones collected from the whole Realm of Sound to form a **Scale** or **Key**, consists of seven members, which conform to the relation of the Harmonic Degree, and is obtained

by projecting the same upward from the tone which is to be the Tonic or Fundamental of the Scale. As follows, for *C*-major:

Ex. 24.



*1) The Harmonic Degree is projected downward *once*, so that the Tonic may appear as *upper* tone of the relation, as well as lower; but with this exception it is successively transferred to *higher* tones. —

*2 The Harmonic Degrees extend upward as far as new tones can be obtained which do not contradict the others. The $f\sharp$ would contradict the lowest tone, and is discarded in favor of the latter for the reason given above. This also accounts for there being no more nor less than *seven* tones.

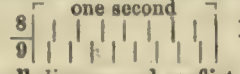
In this form, which is the true **Natural Scale**, the 7 tones are not arranged irregularly as in Ex. 6, but represent exactly equal distances and coincident relations, and exhibit the various grades of quality and importance which the tones bear to each other and to their Tonic.

In the so-called **Diatonic** Scale (Ex. 6) the tones are merely transferred to a higher or lower octave (in accordance with the octave-relation 1 : 2) in order to bring them into convenient proximity to each other. Thus:

Ex. 25.

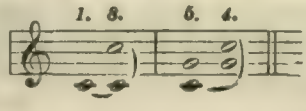
The agreement of these Scales with the natural order of Tone-generation, as illustrated in Ex. 11, confirms their correctness.

---

25. a. The other tone-relations or intervals are defined in the same manner, by the arithmetical proportion of their sound-waves. The proportion 3 : 4 gives the *perfect fourth*; 4 : 5 the *major third*; 5 : 6 the *minor third*. As the tones approach each other, the proportion becomes more complicated, there is a gradually increasing conflict between the sound-waves, and the intervals become less and less consonant. The proportion 8 : 9 gives the *major second* or whole step, in which the conflict of sound-waves is disagreeable. This is illustrated in the following diagram: 

In one stroke out of nine the sound-waves agree, but the 7 or 8 intermediate strokes all *disagree* and conflict. The proportion 15 : 16 gives the *minor* 2nd or half-tone, which is palpably painful.

b. The *minor third* is therefore the *smallest consonant interval*. When the tones approach each other more closely the result is *dissonance*.

c. Those Consonances are *perfect* which represent the Octave, or the Harmonic Degree, direct or reversed, thus: 

. The other Consonances are *imperfect*. Be-

sides the proximate intervals 2nd and 7th, all augmented and diminished intervals (called *Chromatic* in distinction to the others, which are *Diatonic*) owing to the fact that they distort the Natural intervals, are called *Dissonances*.

Perfect Consonances	Unison, Octave, Fifth, Fourth.	**Dissonances**	Seconds, Sevenths, and all augmented and diminished intervals.
Imperfect Consonances	Thirds and Sixths, major and minor.		

---

26. The **Inversion** of an interval is its complement to an Octave. Thus:

Ex. 26.

In the inversions, one tone is simply transferred past the other to a higher or lower *octave*, therefore (on the grounds of 22 d) an interval and its inversion are considered as being *practically identical*.

Chords.

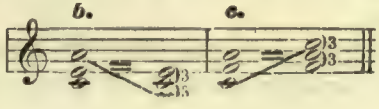
27. A Chord is the combination of *more than two tones*, so chosen that the intervals are entirely or preponderantly Consonances.

28. *Consonant* Chords or *Concords*, containing nothing but consonant intervals, can not embrace more than *three* tones, combined as follows:

Ex. 27.

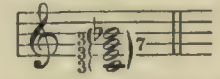
(*E♭* may be substituted for *E*, and *A♭* for *A*, because the intervals 3 and 6 may be either *major* or *minor*. The intervals 5 and 4 must, however, be *perfect* to be consonant). The forms at *d*. *e*. and *f*. are identical with *a*. *b*. and *c*. respectively. *The forms b. and c. are merely subsequent modifications of the first and natural form a, by inversion.* For illustration:

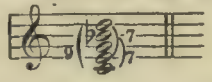
Ex. 28.



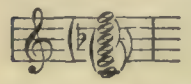
From which it appears that Ex. 27 a., in which the tones lie one above another in thirds, is the primary chord-form, from which all others are derived.

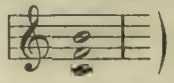
(The scholar will no doubt detect here again the analogy with Ex. 11).

29. a. If another third be added  (the ear sanctions ♭ in preference to ♯) the *new* tone forms a dissonant interval (7^{th}) with the lowest.

b. If still another third be added  there will be three dissonant intervals.

30. a. Chords like these, which contain one or more Dissonances, are called *Dissonant* Chords or *Discords* (Compare 28). Their use in Harmony is not only sanctioned but demanded; because, on account of the peculiar obligations associated with a Dissonance, they are more active than consonant Chords. And, besides, their slight harshness affords a pleasurable and necessary contrast to the purer but less attractive Concords.

b. Still, the dissonant intervals must be introduced judiciously and in moderate proportion to the Consonances, which must largely predominate. The addition of *still* another third to the above Chords  would increase the number of Dissonances to such an extent (as shown by the lines) that there would barely be a predominance of consonant intervals.

c. To such tone-combinations as these, which extend beyond 5 tones and contain an undue proportion of Dissonances, and to such as do not conform to the structure of thirds (for example ) a place is assigned among the so-called **Inharmonic Elements**, where they can be much more simply and satisfactorily analyzed. —

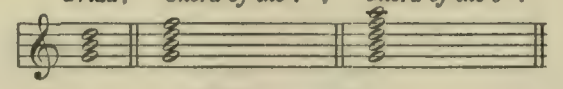
31. The concise definition of a "Chord" is then: *a combination of* **three, four** *or* **five** *tones, in intervals of thirds (or reducible to such).*

---

32. A Chord of three tones is called a **Triad** (usually a *Concord*); a Chord of four tones is called a **Chord of the Seventh** (*Discord*); and a Chord of five tones is called a **Chord of the Ninth** (*Double-discord*).

Ex. 29.

Triad; Chord of the 7^{th}; Chord of the 9^{th}.



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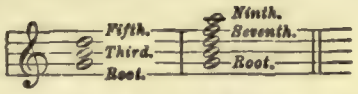
33. The tones which constitute a Chord are called, separately, **the Intervals of the Chord** (or **Chord-intervals**): the term "interval" here again signifying the harmonic *relationship* of the upper tones to the *lowest*.

The lowest Chord-interval (the one upon which the structure of thirds is erected, and from which the whole Chord emanates) is called the Fundamental tone, or **Root**. The other

tones are called the **Third, Fifth, Seventh and Ninth respectively, according to their *distance* from the Root.**

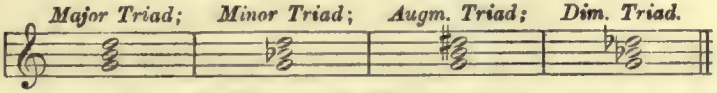
Ex. 30.



The Scholar is warned against confounding *ordinary* intervals, existing between *any* two tones at any part of the Chord, and *Chord-intervals*, which indicate the significant *relations* formed by the several Chord-tones with their Root. The Chord-intervals will be printed with a Capital letter. —

34. A **major** Third and perfect Fifth constitute a **Major Triad;** a **minor** Third and perfect Fifth, a **Minor Triad.** The **Augmented** and **Diminished Triads** have, respectively, an augm. and dim. **Fifth** (the Thirds being respectively major and minor). For example:

Ex. 31.

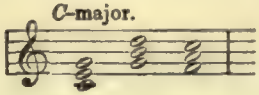


There are a few other distinctions made, in the "species" of Triads, and the varieties of four and five-tone Chords reach a high number. But as it is not the *shape* and *sound* of a Chord, but its *location* in the scale and consequent *relation* to its Tonic which defines its treatment, no further attention will be paid to these distinctions. —

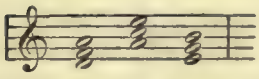
---

35. A Triad may be erected upon each tone of the diatonic Scale, *excepting the Leading-tone* (37), and each Triad takes its name from the *step* of the Scale which its *Root* occupies.

Ex. 32.



Tonic
Dominant
Subdominant
} Triads, or **Principal Triads.**

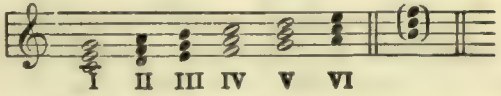


Changing-Dom.
Submediant
Mediant
} Triads, or **Subordinate Triads.**

The first three are principal because they emanate from the principal tones of the Scale (7b), *i. e.*: the *Tonic* or Key-note itself, and those two other tones which stand in the relation of the "Harmonic-Degree" to the Tonic. These are the fundamental harmonies of a Key, and, being *major* triads, they characterize and give the name "major" to their Key. — The last three are **subordinate,** because they lie more remote from their Tonic; and, being *minor* triads, they contradict and oppose the prevalent major character of their Key, and can therefore only appear as subservient and *contrasting* elements.

36. For greater convenience, the triads are designated by Roman numerals, coinciding with the situation of their Roots in the diatonic scale, as follows:

Ex. 33.



Spoken: "The One", "The Two", "The Three", etc.

37. The Triad upon the Leading-tone must be set aside for the present, for reasons which will appear in due time.

The scholar should accustom himself to regard the 7th step of the scale as a purely *melodic* tone with little, or no special, *harmonic* character; and to this circumstance its omission from the list of "Roots" may be ascribed. Compare Ex. 24, in which the location of the Leading-tone, and its extreme distance from the Tonic in the *natural* order of tone-relation, are exhibited.

Exercise three.

Write out the six Triads of every Major Key in the order given in Ex. 32, attaching the Numeral-name to each, as in Ex. 33.

Fundamental principles.

The interval of a perfect fifth, or the Harmonic Degree, is the most significant and *intimate* tone-relation that can exist between different tones. —

The perfect Octave is the *simplest* tone-relation. —

The closer the tones approach each other (in any octave) the more dissonant the interval becomes. —

An interval and its inversion are practically identical. —

A Chord is the combination of from 3 to 5 *thirds*. —

The Leading-tone is never a Root. —

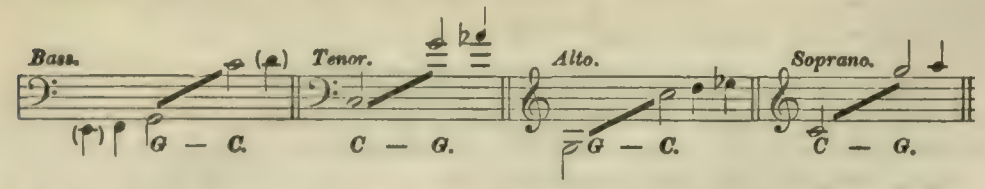
The Voices or Parts.

38. Music of every description is based upon the ***succession of these and similar Chords***, in such harmonic order as the various tone-relations (and the Melody) dictate, and in such metrical order as the character of the piece requires or the fancy of the composer suggests. — For the adequate expression of such a succession of Chords, **four distinct Voices** (otherwise called **Parts**, especially in instrumental music) are necessary, and are usually employed.

a. Chords of three tones furnish material for but *three parts*, it is true, but it is advantageous to double one of these three tones, in order to define the *Chord* and the *Key* with greater distinctness, and for this duplication a *fourth* part is required. And, on the other hand, Chords of five notes, being dense and unwieldy, are almost always deprived of one unimportant Interval, so that even for such Chords four parts are sufficient.

39. These four Voices or Parts are called (from the lowest upward) **Bass, Tenor, Alto** and **Soprano**. As *vocal* parts they have the following ***average*** compass.

Ex. 34.



40. The female parts (Soprano and Alto) correspond respectively in compass to the male parts (Tenor and Bass), but differ just about an octave in register. The highest and lowest of each class (Soprano

and Tenor — Alto and Bass) are therefore called *parallel* parts. — The compass here given is a safe *average*, and is bounded, as will be observed, by the Tonic and Dominant of *C*.

In instrumental music the compass of the parts depends entirely upon the instrument employed; for Pianoforte music the compass is almost unlimited, and the terms Soprano, Alto, Tenor, Bass, refer merely to the *relative position* of the different parts: the *highest* being always "Soprano", the *lowest* always "Bass", etc. — The parts are usually written upon two staves, the female voices in the *G*-clef, the male voices in the *F*-clef; and the stems of the notes are turned respectively upward and downward to distinguish the parts which occupy the same staff — as shown in the above example. See also Ex. 35.

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41. The object, and the relative importance of the individual parts, are as follows:

a. The **Soprano** is the most prominent of the parts, because of its situation *above* them all.

It is a fact, that high tones strike the ear more impressively than low ones, probably on account of the greater rapidity of their sound-waves, which gives them greater acuteness. (The terms "acute" and "grave" are sometimes used instead of "high" and "low", and are a much more correct and appropriate qualification). Therefore the uppermost series of tones will impress the ear with greater force and coherency than any other (unless the attention is drawn to some other part by some artificial emphasis, as seen in Ex. 318 d.*1)), and will constitute the **Melody** proper, the Air or Tune, of the piece.

b. The next in importance is the **Bass** part, which, as lowermost part, defines the Chords, and supplies the harmonic basis of the Composition.

c. The two **Middle parts,** Alto and Tenor, are equally unimportant as individual melodic parts. They merely accompany and support the important outer parts, and complete the Harmony.

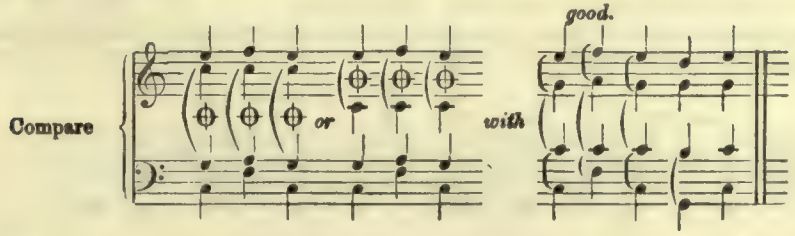
The arrangement and progression of the four parts or melody-lines which coöperate in the expression of a musical thought are illustrated in the following example:

Ex. 35.

42. Rule 1. The parts should not *cross* each other, as thereby their identity is endangered. **Rule 2.** They must not *lie too far apart;* the distance between *neighboring* parts is limited to an octave, as a rule.

(An octave represents a complete "circle" of tones, within which the sounds readily blend, but beyond which they appear *separate*).

Ex. 36.



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*1) The voices sometimes do change their rôles, so that the "Melody" devolves upon a middle or lower part. This irregularity will be considered in its proper place. —

The most notable exception to this second rule is made by the pair of male voices (Tenor and Bass), which being lower, and having consequently greater *fullness and breadth* of tone, may diverge to the extent of an octave and a half (or even more), without losing their connection. Hence the general principle that: the *higher* tones lie, the more *closely* should they be grouped together; and, on the contrary, *low* tones should be kept farther apart.

Duplication of Chord-Intervals.

43. It was remarked in 38 a. that one of the Intervals of a three-tone Chord must be ***doubled*** in order to obtain material for a fourth part, and also for the sake of the Chord itself, and its Key.

Rule. *The best notes to double are* **the principal tones of the scale** (Tonic, Dominant, Subdominant) **wherever they occur;** excepting, only, when they are the *Fifth of a Triad* — which Interval should not be doubled in *any* Triad, if avoidable.

By thus strengthening and emphasizing the chief elements of the scale, the identity of the Key is maintained throughout in the most natural and consistent manner. The result is as follows:

Ex. 37.

From which it appears that

in the *principal* Triads the Root (Ex. 37 a.),
in the *subordinate* Triads the Third (Ex. 37 b.)

should be duplicated, as a general rule.

This distinction in the treatment of the Principal and Subordinate Triads is significant of the difference in their character and quality. —

As seen in Ex. 37 c. the Fifths of both the I and IV are also principal tones of the scale, but, as ***Fifth*** of the Chord, they should not be doubled. In a Subordinate Triad the doubled Fifth is still worse. And it is evident from the fundamental Rule that the duplication of the Thirds in the Principal Triads, where they are subordinate Scale-tones, is objectionable. See Ex. 37 d.

44. There are two additional, exceptional possibilities, as follows:

a. In the Subordinate Triads the **Root** may be doubled (though a subordinate tone of the scale), because it is the principal Interval of the Chord. (Ex. 38 a.).

b. In the ***Principal*** Triads the Fifth may be omitted, and the Root tripled. This is not the case, however, with the subordinate Triads. (Ex. 38 b.)

Ex. 38.

The Positions of a Chord.

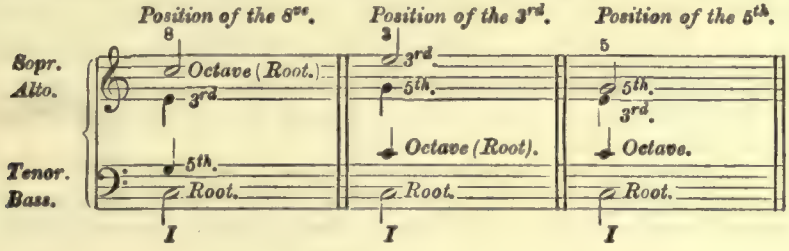
45. From what was said in 41 a. of the superiority and, especially, the ***prominence*** of the Soprano, and in view of the influence it necessarily exerts upon the whole Harmony, it is evident that very much must depend upon the choice of Chord-interval (Root, Third or Fifth) which is to be assigned to that part; particularly, as there is a great difference in the quality and effect of the different tones of a Chord. This choice of the Soprano note (which affects and determines the ***Melody***) defines what we will term, in this Method, the **"Position of the Chord".**

a. When the Root of the Chord is in the Soprano, the Chord is in **Octave Position.** ("Octave" is here synonymous with "Root", but applies to the Root in an *upper* part – not in Bass.)

b. When the Third of the Chord is in the Soprano, the Chord is in the Position of the Third (not *3rd Position!*).

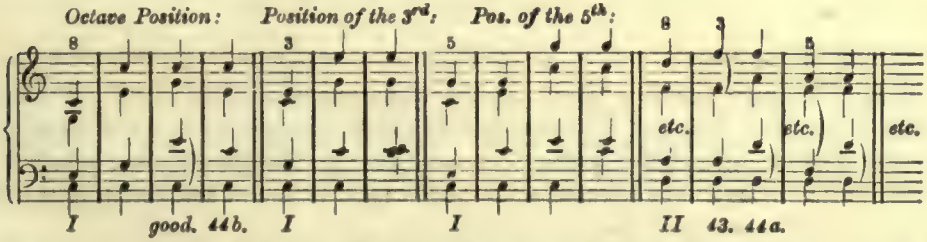
c. When the Fifth is in the Soprano, the Chord is in the Position of the Fifth. Thus:

Ex. 39.



Exercise four.

Erect the six Triads of *C*-major in successive order (I, II, III, IV, V, VI), in their three Positions, according to the following model:



The Root must always be in Bass. Strict regard must be paid to the compass of the parts (Ex. 34) and to their relations (42); and to the duplication of Intervals (43, 44). The following examples are wrong:

Fundamental principles.

The *average* compass of vocal parts lies between *C* and *G* in some register or other. —
The uppermost tones impress the ear most strongly. —
The principal tones of the scale (Tonic, Dominant and Subdominant) should be doubled. —
The Fifth of a Triad must not be doubled. —
The duplication of *any Root* is justifiable. —
The "Position" of a Chord is defined by the *Soprano*. —

The Rules of Part-writing.

46. The mutual operations of the parts in producing a series of Chords and expressing a musical thought (as seen in Ex. 35) are guided by the following **four fundamental laws** of Voice-progression.

Rule I. a. The parts should move as naturally and connectedly (*i. e.* horizontally) from one harmonic interval to another as circumstances will permit.

Wide skips should be avoided, as they tend to obscure the movements of the individual parts, and endanger a correct apprehension of the harmony.

b. A tone which is common to two successive Chords generally *remains* in the same part and octave.

c. This rule applies most especially to the *middle parts*, which must be kept subordinate. The *outer parts* (Soprano and Bass), which are more independent and have a more important object, should not be subjected to great restraint.

Ex. 40.

N. B. Each of these measures is an example by itself, and is not to be connected with the one that follows.

Rule II. a. No two parts (neither Outer, Middle, Adjacent or Parallel parts) should move in *parallel* motion (*i. e.* direction) from one perfect fifth, to another; nor from one perfect octave or unison, to another perfect octave or unison. In other words, parallel or consecutive fifths, octaves and unisons *in the* same pair of voices are strictly prohibited.

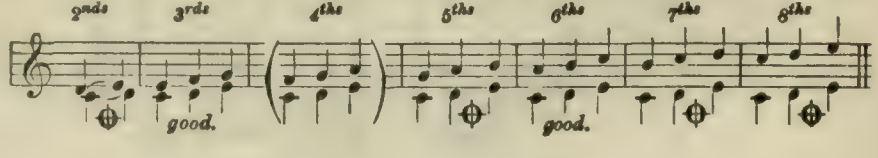
Successive **fifths** *sound* badly. See Appendix A.

Successive **octaves** do not offend the ear; but, when two different parts have the very same progression at the same time, the separate individuality of *each* part is momentarily lost, and the effect is meagre, weak and blundering.

Successive **unisons** are still less excusable, for thereby one part disappears entirely.

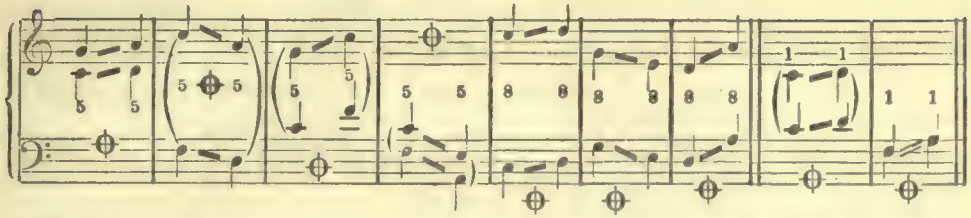
Parallel *seconds* and *sevenths* are not included among the forbidden intervals in the Rule, because they are so obviously incorrect, that the prohibition would be superfluous. Parallel *fourths*, which are certainly very disagreeable in themselves, are not likely to occur *alone*, and whatever accompanies them generally justifies them.

Ex. 41. Parallel motion in



Parallel or Consecutive fifths and octaves

Ex. 42.



The Scholar will recognize which parts are represented in this Example, by the direction in which the stems are turned. The other parts are purposely omitted. —

b. These faults arise from leading the parts in the *same direction*; therefore the most effectual mode of avoiding them is, naturally, ***to lead the parts as much as possible in*** **contrary motion** (*i. e.* two in one direction, and two in the opposite; or one against three), — especially the **outer parts,** which, when they move in parallel direction (both ascending or both descending) are apt to carry the middle parts with them. The danger is greatest when ***all four*** parts move in the same direction.

Rule III. The parts (or, more exactly, any *two* parts) should be led as much as possible **in parallel thirds or sixths,** as progressions of this kind are the surest guarantee of euphony. Comp. Ex. 41, measures 2 and 5.

Ex. 43.

This applies to short progressions as well as to a protracted series of Chords, and is applicable to ***any*** pair of parts, — not necessarily adjacent ones.

Rule IV. a. *The* **Leading-tone must progress diatonically upward to the Tonic,** in whichever part it chances to lie; but especially in the Soprano, that being the most prominent part. Ex. 12.

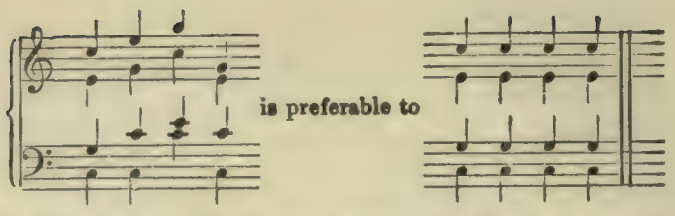
b. The *downward* tendencies of the 6th and 4th steps of the scale must also be respected, *in prominent parts.* Ex. 12.

c. The Leading-tone must never be doubled. (43.)

The general Exception.

47. These rules of harmonic *progression* refer only to the *transition* from one Chord into another (new) one, and are not valid for the mere **repetition,** or change of form, of the same Chord.

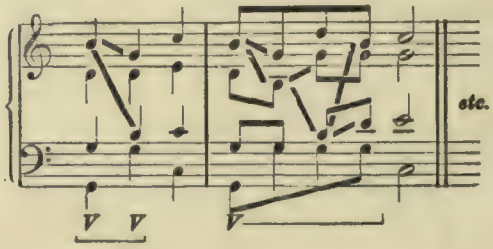
Hence, when a Chord is simply repeated, it may be ***desirable*** to change the location and arrangement of the tones, even with skips (contrary to Rule I), in order to avoid monotony. And in such cases parallel movement in all four parts (see Rule II. b) is not objectionable.

Ex. 44. Thus:  is preferable to

In regard to Rule II: *repeated* fifths, octaves or unisons must not be considered in the same light as *progressive* fifths, etc. The following cases are right:

Ex. 45.

As to Rule IV: the Leading-tone may be transferred from one part to another when the Chord in which it is contained is *repeated*, without necessarily ascending. (Compare Ex. 44.) Thus:

Ex. 46. 

As to Ex. 12: the tendencies of all the Active tones are *suspended* during a repetition of the Chord in which they occur, similar to the above treatment of the Leading-tone.

Fundamental principles.

The voices must move smoothly. —
Parallel 5^{ths} or 8^{ves} in the same pair of parts are forbidden. —
The outer parts usually move in opposite directions. —
Parallel 3^{rds} and 6^{ths} are very desirable. —
The Leading-tone must not be doubled, and it ascends to the Tonic. —
The Repetition of a Chord nullifies all Rules. —

The Qualification of the Tones, Intervals and Chords.

48. The manifest difference in the quality of the various Chords, Chord-intervals and single Tones may be generally and briefly stated as follows:

a. The quality of a Chord is defined by the *distance of its Root from the Tonic in Harmonic Degrees.* This determines the extent to which it supports and confirms the Key, and is also a test of its frequency and recognizability.

b. The quality of a **Chord-Interval** is defined by its *distance from the Root of its Chord, in thirds* (31).

c. The quality of single **Tones** varies according to their connections. As *Roots*, their relative importance is shown in Ex. 24. In other harmonic or melodic capacities they are qualified as in Ex. 10, and at *b.* above.

49. a. Of the **Triads**, the I, V and IV are therefore the strongest and most independent. Then follow the II, VI and III, which are dependent. (Ex. 32).

b. Of the **Chord-Intervals**, the Root, which identifies its Chord, is the strongest. The Third is lighter and more flexible, and is therefore regarded as a better (in fact the *best*) Interval of the Chord, for the practical purposes of composition. The Third also defines the *mode* (major or minor) of its Triad (34).

c. The Fifth of the Chord is a very weak, "soft" Interval, almost entirely devoid of harmonic strength, and one which, as shown in 44 b., may sometimes be dispensed with. It bears the same secondary relation to the Third of the Chord that the latter does to its Root, and is therefore third in importance in its Chord. This may be casually offered, at this place, as one of the reasons for the prohibition of consecutive fifths (46. Rule II).

The "Fifth of a Chord" must not be confounded with the perfect fifth as Harmonic Degree, *i. e.* as grade of relationship between two **independent** tones (Roots, or Key-notes).

d. The Seventh and Ninth of a Chord, being *dissonances*, possess characteristics which distinguish them as the most unstable and dependent of all the Chord-intervals, but which, at the same time, impart a certain keenness and force to them which the Fifth altogether lacks.

50. The difference in the mode of treatment of these various musical members may be expressed, *in general terms*, as follows:

a. The Independent Chords are treated with greater freedom than the Dependent ones, as regards the manner of their introduction and progression.

b. An Independent Chord-interval may enter and progress with a *wide skip*, while those which are Dependent require to move more smoothly, and are often limited to step-wise progression.

c. Not only a skip *from* a Dependent note or Chord-interval, but also a skip *to* it, is incorrect.

d. An Independent Chord-interval should be doubled; those which are Dependent, seldom. (Ex. 37).

e. An Independent Chord may be prolonged almost indefinitely, while the Dependent Chords are generally of short duration.

f. Hence, a protracted succession of Dependent notes, Chord-intervals or Chords, or even a single succession of such as are sensitive, is dangerous to the Key. A judicious interchange of Independent and Dependent tones produces the best Melody; a judicious interchange of Independent and Dependent Chords produces the best Harmony.

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51. In this Method of Harmony the Author proposes to divide the Chords of a Key into **three distinct Classes** or **Elements**, quite similar by themselves, but differing essentially from each other. The distinction will be explained in the proper place, and will be strictly maintained, excepting in the case of a few rare Discords of exceptional character. The Scholar will soon learn to assign each Chord its rank in the Class to which it belongs, and will have but three primary laws of Chord-succession to consider and respect, instead of regulating the movements of each Chord separately. The three Classes will be named: **Tonic** Class, **Dominant** Class (or the **First** Class of non-tonic Chords), and **Subdominant** (or **Second**) Class. (165. 220).

PART II.

THE COMBINATION OR CONNECTION OF CHORDS.

Division A: Concords.

Section I[st]: Triads.

The Tonic Triad, I.

52. This is the **fundamental** representative of the Tonic Class of Chords (51). It is the Alpha and Omega of the Harmonic system. It can progress with equal facility to (that is to say, can be followed by) *every other Chord in its Key.*

53. The Position of the **Third** is the best, in general. (Ex. 39). The Octave-Position is heavy; that of the Fifth somewhat weak. (Comp. 49 c).

The Dominant Triad, V.

This is the **fundamental** representative of the **Dominant** or First Class of Chords (51).

54. a. The V contains the most important melodic note of the scale, *i. e.* the Leading-tone. This appears in no other Triad but the III, in which it is the unimportant Fifth.

b. Hence the V, in order to satisfy the tendency of the Leading-tone, must naturally progress to such Chords as contain the Tonic note, *i. e.* first of all, to the Tonic Triad.

c. In noteworthy contrast to the Tonic Triad, which is characterized by its ability to progress directly to every other Chord in the harmonic system, the Dominant Triad is distinguished as the Chord into which every other can, and in truth, *must* progress, as the medium through which the Tonic (the Object of all harmonic succession) may eventually be reached.

55. In the Dominant Triad there is but little choice of Position; the Soprano can take any Interval, the Octave being perhaps the least frequent.

56. The relation between the I and V (the Harmonic Degree) is a sufficient guarantee of the facility with which they may be connected, *i. e.* may progress into, or be followed by, each other. This succession of Chords (I—V or V—I) is the most common in Music, as is obvious from their superiority over all other Chords.

57. The following Examples illustrate the combination of the I with the V in each order. The choice of ***Chords*** determines the ***Bass*** part, which takes the Root. The Melody (Soprano part) is next found by deciding which ***Position*** each Chord is to take; this depends partly upon the tone which lies ***nearest*** to the first Soprano note (Rule I, 46), and partly upon the general rules of Position (53. 55).

In these Examples the possibilities of the Soprano are exhausted by progressing systematically from each of the 3 Positions of the first Chord to each Position of the next, in the order of their proximity.

The Middle parts are then added (generally the Alto first) by completing each Chord as in Exercise 4, but with strict regard to the fundamental rules of paragraph 46.

Each "measure" is an example by itself! No special Rhythm is intended; unless marked with an accent (ˇ) it will be understood that *either* Chord may occupy the accented beat of the measure. The signs ⊖, ??, ?, (?), denote the quality of the example in question, and are self-explaining. The Scholar should try to discover the reason for each distinction. The given references, and the *lines* drawn between certain notes, indicate where the errors lie.

The connection I—V (*C*-major).

a. From the **Octave**-position of the I:

Ex. 47.

b. From the Position of the **Third** of the I:

Ex. 48.

c. From the Position of the **Fifth** of the I:

Ex. 49.

*1) Rule I b (46). — *2) Rule II. — *3) This measure illustrates (in Soprano and Bass) a noteworthy modification of the error shown in Rule II, namely: successive octaves in contrary motion; and at *4) the same kind of successive fifths is exhibited. In the case of *octaves*, the difference in direction is usually a sufficient excuse, even in prominent parts. But successive *fifths* are just as objectionable in opposite as in parallel motion, — excepting always when one of the tones is in a Middle part, where it is less noticeable Ex. 47, No. 4, Tenor and Bass). — *5 Rule II b. — *6) Rule I a. — *7) Both objectionable, on account of the wide skip in the conspicuous Soprano part to the sensitive Leading-tone (50 c). In Ex. 47—7 the same skip in *Tenor* (middle part) is of no account. — *8) The repetition of a Melody-note is slightly monotonous, but by no means wrong. —

58. The object of these and all subsequent Examples is: firstly, to furnish the scholar with a sufficient (if not exhaustive) illustration of the harmonic progressions, as a table to which he can refer in working out his Exercises; secondly, and perhaps chiefly, to afford him a test to which he can apply his *ear*, and according to which he can and should cultivate his musical sensibility. *Therefore the Examples must be studied at a well-tuned Piano* (or some other manual instrument *by being played through slowly and thoughtfully, each correct measure several times in succession, first emphasizing one part and then another, and, if possible, humming or softly singing the Soprano part (Melody) each time.* The explanatory notes which follow each Example should also be carefully studied. The third object of the Examples is to afford the Scholar material with which to construct *original* phrases, if he desires.

59. The following general rules for the Soprano may be deduced from these examples.

a. Two *Octave-Positions* in succession in Triads are dangerous (Ex. 47, meas. 9, 10).

b. Two *Positions of the fifth* in succession in Triads are always bad (Ex. 49—6, 7).

c. A *wide skip* (*i. e.* beyond a 3rd) to or from the Leading-tone is objectionable in the *Soprano* (Ex. 48—7, 8; and Ex. 51—2).

d. The *repetition* of a Melody-note is somewhat monotonous (Ex. 49—1).

The reversed succession, V—I.

60. a. From the Octave-Position of the V

Ex. 50.

b. From the position of the Third:

Ex. 51.

c. From the position of the Fifth:

Ex. 52.

*1) The Tenor takes the Leading-tone *downward* to the Dominant, instead of upward to the Tonic according to rule. This irregularity is allowed in a *Middle part* (not in Soprano — Ex. 51—3); but only when, as indicated in 12 e, it is preceded by a higher tone: that is, when it is *pushed* downward from above. See Ex. 53 d.

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61. **a.** Although the Chords I and V stand each in the relation of a Harmonic Degree to the other, it does not follow that their connection is equally natural either way. The natural arrangement of Chord-Roots *above* the Tonic (with one apparent exception, to be accounted for later on) as seen in Ex. 24, proves that their inclination must be *downwards* in Harmonic Degrees, in order to reach the Tonic, in which their obligations are fulfilled. Consequently the succession V—I (Exs. 50—52) is more natural than I—V (Exs. 47—49).

b. This progression, *in which the Chord* **falls one Harmonic Degree, we will therefore distinguish from all other Chord-successions by the term "Normal" or "Regular" Progression.**

Exercise five.

Combine the I—V in *G*-major; the V—I in *B♭*-major; the I—V in *E*-major; and the V—I in *D♭*-major, according to the foregoing Examples. —

Fundamental principles.

The Tonic Triad (I) can progress to any other Chord. —
Every Chord can progress to the Dominant Triad. —
The Dominant Chord is characterized by the Leading-tone. —
Successive octaves in *contrary* motion are allowed, but not fifths —
Successive Positions of the Fifth are bad. —
Middle parts are less noticeable than Soprano or Bass. —
The Regular or "Normal" Progression of a Chord is a Harmonic Degree *downward* (from Root to Root). —

The Perfect Cadence.

62. **a.** **Cadences** are the interruptions or momentary pauses in the rhythm, which are necessary for separating the different melodic and rhythmic members or Sections of a composition, and which indicate, by the manner of their appearance and recurrence, the Form, or Plan of construction, upon which the composition is based. **All Cadences fall upon accented beats.** The Cadence-Chord, in order to interrupt the rhythm, must be a *heavier* (longer) tone than the preceding one.

b. **The Perfect Cadence, or full stop, which occurs at the end of the piece, or at the close of a large Section, consists of**

the Tonic Triad,
in Octave-Position,
on an accented beat, and
preceded by the Dominant Triad (in any Position)

The Tonic notes in ***Bass*** (I) and in ***Soprano*** (the Octave-Position) bring both the Harmony and Melody to a satisfactory conclusion. The V must, however, precede them, as the identity of the Tonic Class depends upon the Leading-tone, which only the V contains. The following Example illustrates different forms of the Perfect Cadence:

Ex. 53.

The Phrase.

63. **a.** The smallest limits within which a harmonic and melodic thought may be adequately expressed is the Phrase. It is distinguished from larger forms in having but one positive rhythmic interruption, namely: the *Perfect Cadence* at the end.

b. It may be **two, four,** or **eight** measures in length; seldom an uneven number, as 3, 6, or 9 measures.

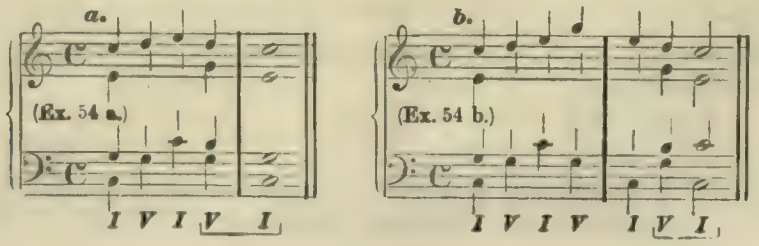
c. It commences with the Tonic Triad, ***in any Position***, and upon an accented or unaccented beat at option; and closes, as already stated, with the Perfect Cadence (V—I) upon an accented beat (***either*** accent) of the second, fourth, or eighth measure.

64. The outline of a Phrase of two measures, in *C*-time, may be then as follows:

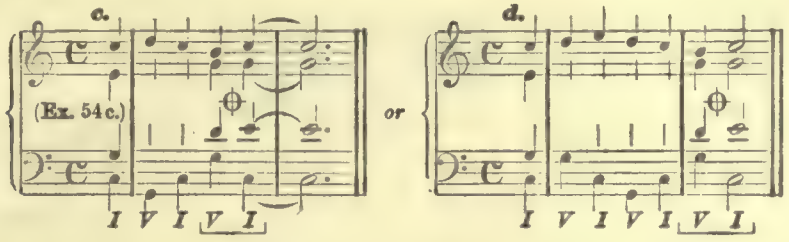
Ex. 54.

65. **a.** The unoccupied beats (denoted by |||) may be supplied with the Tonic and Dominant Triads in the following manner, the Melody-notes being chosen according to Rule I (**46**):

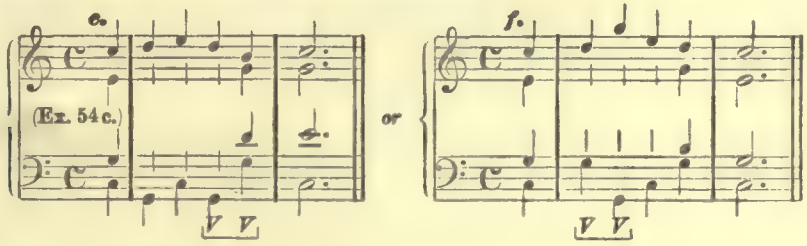
Ex. 55.



The regular alternation of I and V in Ex. 54 c would misplace the Perfect Cadence, by bringing the I upon an unaccented beat, thus:

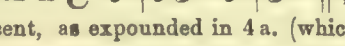


To avoid which, *one of the Chords must be* repeated:



b. But the repetition of a Chord in the course of a Phrase is subject to certain rules of Rhythm. A repetition like the following, from an unaccented to an accented beat, would displace an accent, and occasion what may be called a "**Rhythmical Halt**":

Ex. 56.

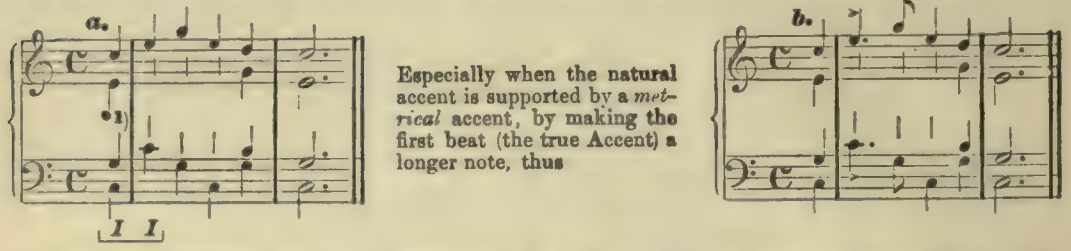
because the rhythmical outline, which is  , is at variance with the principles of metrical and *harmonical* accent, as expounded in 4 a. (which see).

66. Hence it appears, that a Chord may be repeated from an accented to an unaccented beat, but not from an unaccented to an accented one; for the impression of a *new rhythmic group* (indicated by its Accent), should be supported by the announcement of a *new harmonic combination.*

In other words, to prolong a Chord beyond its beat is to impart a metrical accent to that beat; therefore it is clear that *only such Chords as occupy* naturally accented beats (*i. e. down-beats*) *may be prolonged* (by Repetition, or by Ties).

a. An exception to this rhythmical rule is always admitted at the *very first* Accent of a Phrase. Thus

Ex. 57.

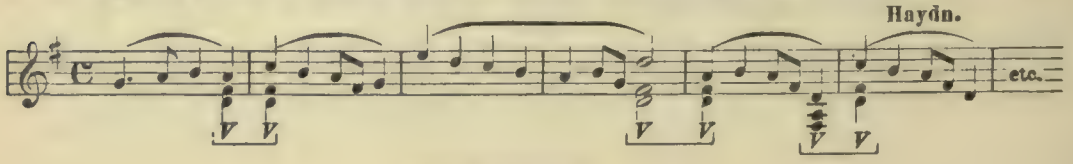


Especially when the natural accent is supported by a *metrical* accent, by making the first beat (the true Accent) a longer note, thus

*1) This first unaccented beat (called sometimes "the Up-beat") is simply a *preliminary* beat, and is never included in the actual rhythmic progression. But it must be deducted from the final measure, nevertheless.

b. This exception is also allowed at the first accent of a *new* Phrase, or *distinct melodic member* of a Phrase, and in Sequences, where it is possible that the *first* Chord of the new Phrase or Motive or Sequence may coincide with the *last* Chord of the preceding Phrase or Motive; because these two Chords, in their relations to their respective Phrases or Motives, have less rhythmic connection with each other. For example:

Ex. 58.



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67. The Melody (Soprano) of these examples may also be constructed in the following ways:

Ex. 59.

But they are somewhat less smooth and natural than the construction of the Soprano as shown in Ex. 55. — In this manner, however, the Soprano should be repeatedly tested and improved until the very best Melody has been found that the Bass (or the given Harmony) will yield.

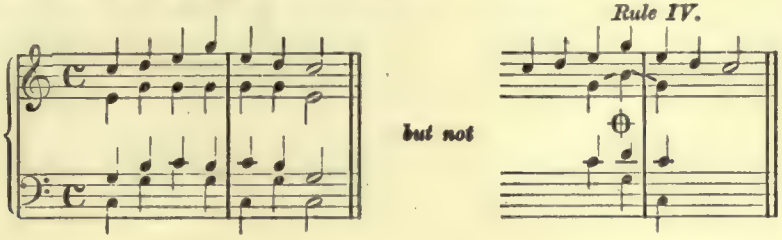
68. A melodic progression like the following, involving a "Perfect cadence" anywhere in the course of a Phrase, would be obviously incorrect

Ex. 60.

Hence it is advisable to avoid the *Octave-Position* of the *Tonic Triad* in the course of a Phrase, especially on the *accented* beats (but always excepting when it is only a Repetition — see 47.)

69. After the Melody has thus been determined, throughout the Phrase, the addition of the middle parts is an easy task. Ex. 55 b, when completed, is as follows:

Ex. 61.



Exercise six.

The following given Basses, indicating certain harmonic progressions in Phrase-form, are to be supplied with Soprano, Alto and Tenor, as shown above.

N.B. The Soprano must be written out complete, before the Middle parts are filled in. The Bass notes are successive *Roots*. The numbers above the notes refer to the *Position* (Soprano note) to be taken; the sign + before a number indicates the *high* Position; the sign –, the *low* Position. The last Bass ("Numbered Bass") is to be written out in the given Key and treated like the others.

N. B. These Phrases are not to be tested at the Piano until after they have been carefully and *completely* worked out *at the table!* Those Scholars who prefer to work independently of the given Positions, may of course ignore them, and choose their own Melody (perhaps a number of different ones). In this case 59 and 47 must be carefully consulted.

Fundamental principles.

All Cadences fall upon accented beats. —

The Perf. Cadence is made on the I, in 8ve-Position, accented, and preceded by the V. —

A Chord must not be repeated over the bar, or over an Accent. —

Avoid monotony in the Melody, but also too many wide skips. —

The Subdominant Triad, IV.

70. This is not the ***fundamental*** representative of the Second Class of non-tonic Chords (51), as will be subsequently seen. But it is one of the most important of the Class, on account of its perfect-fifth relation to the Tonic note. It is a broader, heavier, more "masculine" Chord than the V, and its characteristic feature is, the possession of the 6^{th} *and* 4^{th} Steps of the Scale (the tones with *downward* tendencies) which distinguish it from the Dominant Triad (54a).

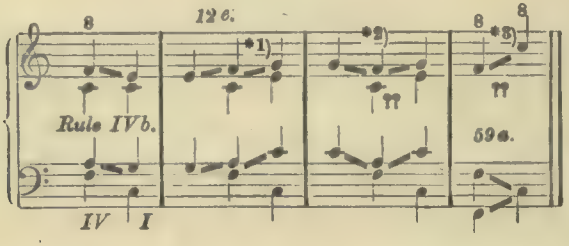
71. The Position of the *Third* is preferable to either the Pos. of the Octave or that of the Fifth.

72. The IV bears the same relation to the I that the V does (a Harmonic Degree), and therefore its connections with the former are as natural and convenient as those of the V. (56.) The Scholar is referred to 57 *and 58!*

73. The combination of the IV with the I is as follows:

a. From the Octave position of the IV.

Ex. 62. IV—I.



b. From the position of the 3rd:

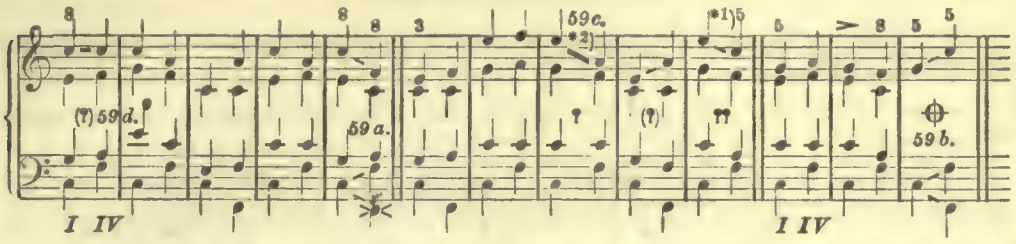
c. From the position of the 5th:

*1) The 4th step moves *upward* in Soprano, because approached diatonically from below. — *2) When approached from *above*, its natural inclination is strengthened, and it *must move downward!* And so, also, with the 6th step. — *3) This is quite objectionable, whether the Octaves are parallel or opposite, because the 4th step skips upward in Soprano, contrary to its natural tendency. Compare Ex. 47—9, 10. — *4) The upward progression of the 4th and 6th steps in the *Middle* parts is not very bad; still, the following measure (*5)) is better, notwithstanding the doubled Mediant (e) in Sopr. and Alto. *This proves that the rule of correct melodic progression is more significant than the rules of duplication!* In other words, the melodic successions must be correct and smooth, even at the cost of other *general* rules. This applies, as usual, principally to the Soprano part.

74. The reverse of this connection, *i. e.* from the I into the IV, coincides with the **Normal Progression** (61).

a. From the Octave position of the I; **b.** From the position of the 3rd; **c.** From the position of the 5th.

Ex. 63. I—IV.



*1) The skip to the *Fifth* in Soprano, though but short, is disagreeable. — *2) The skip here is not as bad, because, though both tones are Subordinate steps of the scale, neither of them is a Fifth, nor the Leading-tone; the following measure is better, because the skip is shorter.

75. In regard, then, to *wide skips* **in the Soprano,** the following may be added to what was given in 59 c:

a. If either tone be the **Leading-tone,** the wide skip will be objectionable. (Ex. 48—7, 8; Ex 51—2).

b. If either or both of the tones be the **Fifth** of the Chord, the wide skip must be avoided. (Ex. 49—6, 7; Ex. 52—3, 4; Ex. 62—11; Ex. 63—10, 13).

c. *Any rational skip* is allowed where a Chord is simply **repeated** (47). But see 11.

How the quality and nature of the *Chord-progression* affect these rules will be seen later on. (Ex. 76; Ex. 82).

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76. The fact that a Phrase can not very well consist of the I and IV alone, proves that the IV is inferior to the V, which in the foregoing Exercise *was* used with the I alone in constructing simple Phrases. The individual harmonic character of the IV, (its heaviness and, in a certain sense, dullness) renders it less frequent than the other two principal Triads (I and V). It is most effective near the final Cadence, where its breadth is very appropriate, as suggesting and supporting the impression of completion and repose.

The following Phrases are therefore somewhat unnatural:

Ex. 64.

Not so this one, however, which consists of the Tonic Triad in alternation with the Dominant and Subdominant Triads: *i. e.* the progressions I—IV—I and I—V—I, with frequent repetitions.

Ex. 65.

The consistent and symmetrical construction of this Melody is shown by the brackets and slurs. See 13 b

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Exercise seven.

The scholar is to supply Ex. 64b and Ex. 65 with middle parts; and to work out the following Basses as before.

Review the remarks before and after Exercise six. Complete the Soprano before filling out the Middle parts.

*1) The figures slurred together indicate that the Chord is to be struck twice in the upper parts, in different Positions. This is done for the sake of the Rhythm. — *2) This somewhat irregular repetition of the I (prolonged from an *unaccented* beat — 66) is less objectionable than usual, because, being the second beat in Triple time, it is not prolonged to a *stronger* beat. — *3) The wanting Melody-notes may easily be found by strict observance of Rule IV b. (46.)

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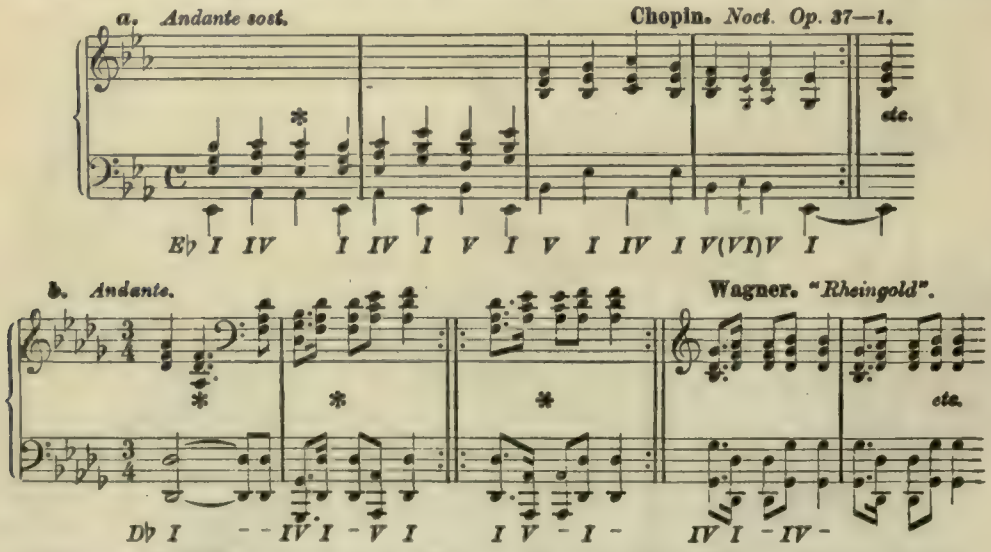
77. That these simple Triads may be and have been effectively employed in Phrases, devoid of all embellishment, is proven by the following extracts from two of the most romantic Composers.

Ex. 66.



* These rhythmical discrepancies are justified upon grounds which will be explained in due time.

Fundamental principles.

The Subdominant Chord is characterized by the possession of the 6th and 4th Steps. —

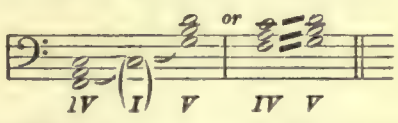
Smooth progression and correct melodic direction are the most essential rules of Part-writing. —

Wide skips in the Soprano part are objectionable if either tone is sensitive (Leading-tone, or Fifth of the Chord), except in Repetitions. —

In *Triads*, the Position of the Third is usually the best. —

Combination of the Subdominant and Dominant Triads.

78. Having in the foregoing examples illustrated the combination of the Tonic Triad with the Dominant and Subdominant Triads *respectively*, it now remains to consider the combination of these latter (non-Tonic) Chords *with each other*. This involves a new phase of Chord-progression, because the IV and V are not only not related to each other by a Harmonic Degree, but are not even related by coincidence of tones (*i. e.* they possess no tone in common). Lying in opposite directions from the Tonic, they are *two* Harmonic Degrees apart, or, when placed nearer together, one step. Thus:



79. All Chord-progressions of this kind, where there is no common tone, are recognized by their *neighboring Roots* (*i. e.* lying side by side in the Scale), and will be distinguished in this Method as "**Foreign Progressions**". See Appendix B.

80. Foreign Chord-progressions are more difficult than any others, because of their lack of a common tone as natural connecting link. Hence, greater care must be taken to avoid disconnectedness, forbidden parallels, etc. In a word, the rules must be applied with more rigor than usual:

a. **Wide skips** *are almost entirely prohibited, in every part;* **and**

b. *All three upper parts should move in* **contrary** *direction to the Bass.*

Ex. 67. IV—V.

*1) This may be admissible, because skips in a *Middle* part are not so noticeable as in Soprano, but it is very exceptional. — *2) Doubled Leading-tone. — *3) Allowable, because the Fifth of the first Triad is omitted. — *4) This measure is wrong, because the ear will not follow the Tenor in its skip from *c* down to *g* (which belongs properly to the Bass), but associates the *c* with the following *d* of the Alto, so that parallel 5ths are distinctly heard. This peculiar and comparatively rare error, which *sounds* like successive 5ths without their actually appearing in the same pair of voices, is called "*Ear Fifths*". They are worst in Foreign Progressions.

81. **a.** The reversed combination, V—IV, is extremely unnatural, and therefore *barely possible;* because the Leading-tone in the V is so suggestive of the Tonic and the Tonic harmony, that the IV (in which the Tonic is but the *Fifth* sounds disappointing and disagreeable, especially when the Leading-tone is in the Soprano; when it is in a middle part the progression is less noticeable, although hardly less objectionable and peculiar.

b. All Chords are attracted by the Tonic Class, which they must ultimately reach; and that Chord which naturally lies nearest to the Tonic (the V — compare 220) is attracted so strongly that it can progress nowhere else, *legitimately.* Hence the canon of harmonic movement:

The Chords of the *Dominant Class* progress legitimately into the *Tonic Class;* not into the Subdominant.

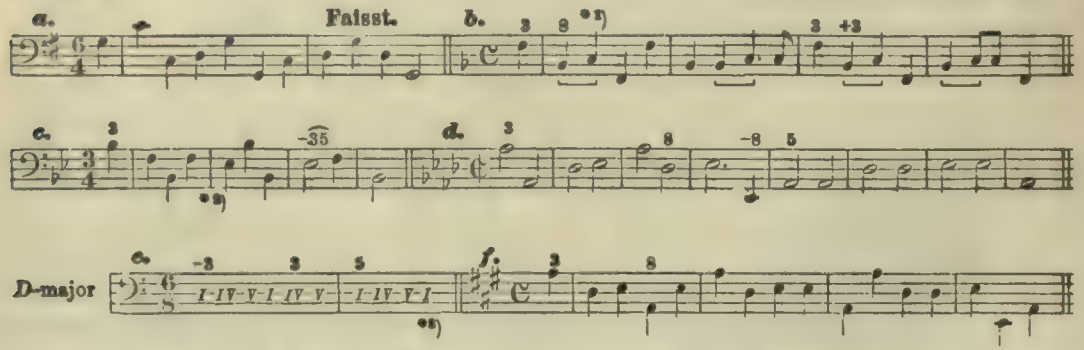
Nos. 4 and 5 of the following Example exhibit a peculiar connection in which this irregular progression can be utilized. Its application and explanation must however be deferred for a time.

Ex. 68.
V—IV.

*1) The direct succession of "Leading-tone" and "Fifth" (the most sensitive Chord-interval) in the prominent *Soprano*, is what makes this example worse than the following ones, where it appears in a *middle* part.

Exercise eight.

In the first Bass the Positions are purposely omitted. It may be worked out at the blackboard, with the Teacher.



*1) The "Foreign Progressions" are indicated by brackets throughout this Bass. The Melody is found according to 80 a. b. — *2) The irregular progression V—IV. — *3) Value —

Fundamental principles.

In Foreign Progressions the Roots of the Chords occupy neighboring steps of the Scale. — In such progressions no wide skips are allowed, and the upper parts move contrary to the Bass. —

Dominant Chords progress, legitimately, *only into Tonic Chords.* —

The Principal Triads in the Minor Mode.

82. The origin of the Natural scale was shown in Ex. 24. — The three principal Triads are *drawn from this scale*, and prove to be all *major* Triads (see note to Ex. 32), for which reason the scale is called "Major". — The so-called "Minor" scale is a modification of this "Natural", or Major scale, and may therefore be called an "Artificial" scale. It is constructed simply as follows:

a. The principal Triads of the Major scale are transformed into *minor* Triads, by contracting their Thirds (Ex. 21, and Ex. 31),

b. The Minor **Scale,** reversing the natural process, is then *drawn from these Chords.* Thus:

Ex. 69.

c. This process defines the *Signature* of the Minor scales. In this instance, *C*-minor, it is three flats. That Major Key from which the Signature is borrowed (the Minor scales having no independent Signatures) is called the "Relative" or "Parallel" Major, (in this case $E\flat$-Major); but it has nothing to do with the above derivation from *C*-Major, which may be called, in contradistinction, the *Original* Major, or the "*Opposite Mode*" (See 268.)

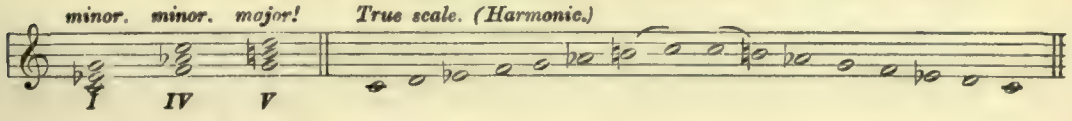
83. It is very noticeable that the above Minor scale sounds more satisfactory in the *descending* than in the *ascending* direction.

This is owing to the fact that the *last* interval in the ascending scale must be a *half-step;* in other words, that the *Leading-tone,* in order to acquire and retain its superior and characteristic melodic force, must lie *as close as possible* to the Tonic note.

Its upward inclination depends upon its proximity to the Tonic (comp. 12 c), and, if the interval were to be widened to a whole step, as in Ex. 69, it would be robbed to a great degree of its peculiar melodic influence and function in the scale.

84. Therefore this minor scale, being only an "artificial" scale in any case, submits readily to an ulterior modification by which the Leading-tone maintains its half-step proximity to the Tonic, and the *Dominant Triad remains a major Chord, as in Major. Thus:*

Ex. 70.



85. That the *descending* scale in Ex. 69 (with b♭ instead of b♮) sounds well, and that *both* scales in Ex. 70 may be made to sound better (as Scales), only proves that this "artificial" scale is subject to still other modifications. But these other changes are only necessary where the independent *melodic* progression of the individual voices is concerned, and will be considered in the proper place. The function of the 7th step of the scale, *as Leading-tone*, is a vital factor in *Harmony*, and must be respected. Hence the scale in Ex. 70 is called the "**Harmonic**" Minor scale, and is the same both in ascending and descending direction.

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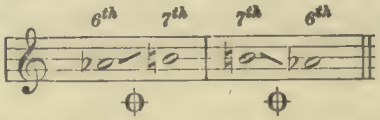
86. As the 6th step in Minor lies a half-step nearer to the Dominant than it does in Major, its melodic tendency downward is intensified so that it equals that of the 7th step upward. In consideration of this fact it may be called (in Minor) the "**Dominant Leading-tone**".

The 7th step may be termed, in distinction, the "*Tonic* Leading-tone", or simply "Leading-tone" as heretofore.

87. **a.** *The Dominant Leading-tone must progress downward*, and it is better not to double it.

b. It is strictly forbidden to progress *from one Leading-tone to the other*, in any part.

Ex. 71.



Not only because each of the tones would progress in the wrong direction, but because the succession involves a very unnatural chromatic interval (an augm. 2nd) which it is impossible to sing exactly true, and which sounds abnormal and incoherent. This error is best avoided by careful attention to 87 a; or Rule IV, a and b.

This succession may be produced on an *Instrument*, it is true, but it always sounds unnatural, and is only appropriate in certain cases, where a weird dramatic effect is desired.

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88. The Chord-Progressions in Minor are of precisely the same quality as in Major (56, 61, 72, 74, 78, 81) and are executed in precisely the same manner, and according to the same rules. (87 a. merely emphasizes a former rule.)

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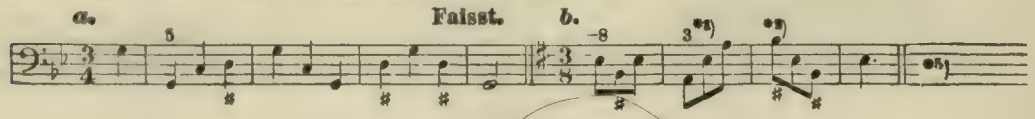
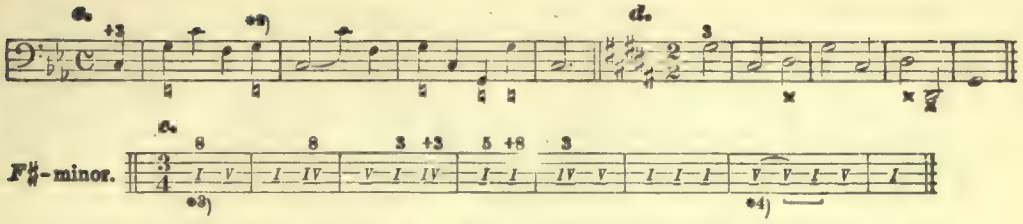
89. In effect, the Minor mode is more sympathetic and agreeable to the sense than the Major; its greater number of half-steps make it a more graceful and *melodious* scale. The beauties and advantages of Minor will only be appreciated by the scholar after he has acquired a thorough comprehension of *Major*, in which scale the natural and regular workings of harmonic bodies can be studied with greater profit.

Exercise nine.

The Signatures show that the following Basses are in *Minor*. The accidentals below certain bass tones refer to the Third of the Chord (in Bass No. 1, *f♯*, the Leading-tone; comp. Ex. 70) and are rendered necessary by the absence of the corresponding accidental in the Signature. — See Remark to Exercise eight.





*1) 87 a. — *2) 80 b. — *3) Rhythm ♪ ♩, of course. —

*4) The bracket ⌐¬ indicates that both Chords belong to *one beat*. The tie ⁀ signifies here, as elsewhere, that the Chord is to be *held*, not reiterated; the Rhythm of this measure is therefore ♩ ♪♪ ♩ or ♩. ♪ ♩ ——

*5) The *Bass and Soprano* of this second example are to be written out (and played) in every other Minor Key. —

Fundamental principles.

The Minor Mode is derived from the Major Key of the same Tonic. —

The Harmonic Minor Scale differs from the Major at the 3rd and 6th Steps, which are major in Major and minor in Minor. —

The Dominant Chord is alike in both Modes. —

The 6th Step in Minor *must* progress downwards. —

The two Leading-tones (6th and 7th Steps) must not succeed each other in the same part. —

There is no essential difference in the treatment of the Major and Minor Harmonies. —

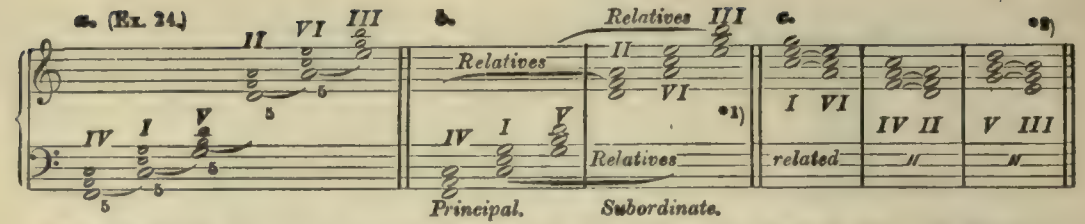
The Subordinate Triads

in the Major Mode (see Ex. 32).

90. These three Triads should not be regarded as entirely new and independent Harmonies, but merely as new *forms* of the Principal Triads. Aside from the relation which they bear to each other and to their Tonic (as implied in 48 a, and illustrated in Ex. 72 a) there also exists an intimate and significant relationship between the separate Subordinate and Principal Triads. Each Subordinate Triad alone is accessory to one particular Principal Triad, in the connection commonly known as "Relative" major and minor. Namely: the accessory of the I is the VI (representing respectively *C*-major and *A*-minor); the accessory of the IV is the II (representing *F*-major and *D*-minor), and that of the V is the III (*G*-major and *E*-minor).

91. An exact analysis and exposition of this harmonic relationship is neither necessary nor possible at this moment. It will develop itself naturally in the course of the succeeding lessons. The following example is a sufficient illustration for the present.

Ex. 72



*1) The "Relatives" occupy corresponding places in the two species of Chords (Prin. and Subord.). — *2) The "Relatives" represent Parallel Major and Minor scales, *i. e.* with the same Signature. See 82 c.

92. To *its own* Principal Triad (called the *Parallel* or *Relative* Triad) each Subordinate Triad is closely related, usually acting as substitute for it and deducing most of its harmonic regulations from those of its Relative. Hence they are to be regarded as joint representatives of the same harmonic Class or Element; *i. e.* the I and the VI together represent the Tonic Element or Class of Chords, the IV and II the Subdominant Element or Class, and the V and III the Dominant Element or Class. In other words: the VI is a Tonic Chord, the II a Subdominant, and the III a Dominant Chord. See 51!

93. The harmonic intimacy is strongest between the Subdom. Chords IV and II*1); weakest between the Dominant Chords V and III; and medium between the Tonic Chords I and VI.

*1) Probably because the II, being the first of the Subord. Triads, and lying nearest to the Prin. Triads in the order of Harm. Degrees (Ex. 72 a) is most closely allied to the latter in quality. This also accounts for the inferior degree of relationship between the V and the remote III. See also 220.

The Changing-dominant Triad, II.

94. **a.** This is in reality the **fundamental** representative of the Subdominant or Second Class, as will be seen later on. Comp. 70.

b. The best Position (Soprano note) is that of the **Third.**

c. The *Octave* Position of a Subordinate Triad is more objectionable than in a Principal one, because undue prominence is given to a subordinate step of the scale, in placing it thus in both outer parts at once. Still, the Octave Pos. of the II is not forbidden, because it is the best of the Subord. Triads.

d. The Position of the **Fifth** is *very objectionable* in this Triad.

95. Either the Third or Root may be doubled. No Interval can be omitted. Review 43, 44 a.

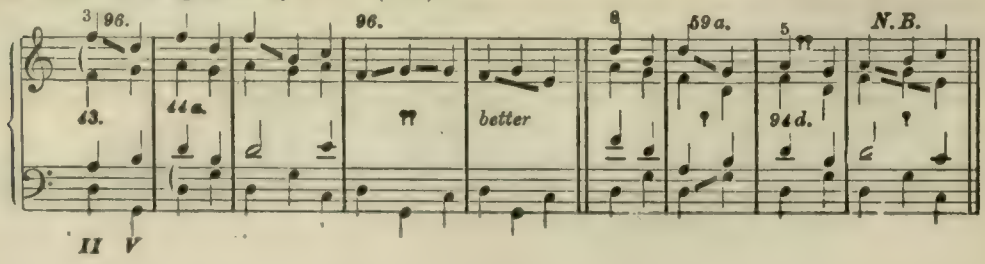
96. Being a Subdominant Chord, the II contains the 4th and 6th steps of the scale See 70. *Great care must be taken to lead them* **downwards,** — especially in Soprano.

97. The following Examples illustrate the *Progressions* of the II, in the order of natural preference.

The Examples, hereafter, will be condensed as much as possible. The scholar is again referred to 58.

a. The **Normal Progression,** II—V (61 b).

Ex. 73. II—V.



No. 3 is not wrong, despite the wide skip in Soprano to the Leading-tone (75 a); chiefly because it is a skip *downward*, and the Melody in turning back partly equalizes the distance. The skip *upward* to the Leading-tone is always wrong excepting in Repetitions 1). — No. 5 illustrates a case which is very common in Harmonic and Melodic progressions, namely, the "**Deferred**" (or intercepted) **Resolution.***1) The 4th step in Sopr. reaches the 3rd *indirectly*, after *one convenient tone* has been interposed. — No. 4 is doubtful because the correct progression is evaded altogether. — No. 9 is a curious exception to several rules, which will be elucidated later. For the present, the suggestive lines in Sopr. and Alto will suffice. That this same melodic violation of Rule IV b (and 96) was not allowed in Ex. 67 - 9, 10, is owing to the relation between the Chords there, a Foreign Prog., and here a Normal one. —

*1) The term "Resolution" is applied to **every** *obligatory* **or desirable progression which fulfils the obligations of a Dependent tone. See 166.**

b. To the Tonic Triad: a **Foreign Progression** (80).

Ex. 74.
II—I.

*1) In every Foreign Progression excepting IV—V (Ex. 67, where *both are Prin.* Triads) it suffices to lead *two* upper parts contrary to the Bass; the other one moves in 3rds parallel with the latter. — *2) Comp. Ex. 62—2, 3. —

c. To the remaining Prin. Triad, the IV.

This progression of the II, into *its own* Relative Prin. Triad, is not good. When the two representatives of the *same* Class (Ex. 72 c) are connected, the Subordinate Triad should **follow**, not **precede**, its own Principal Triad. In other words: of the two Parallel Chords, the Principal Triad comes first. Thus, the IV can progress to the II, but the II cannot progress to the IV. And the same applies to the other Classes; I—VI is correct, but VI—I is wrong; V—III is allowed, III—V is incorrect.

Ex. 75.

*1) **This is the** *only* **rare exception to 54 c. —**

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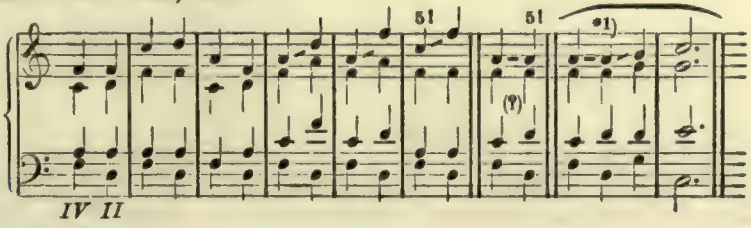
98. The *Introduction* of the II is exhibited in the following Examples; arranged, as before, in the order of preference.

a. By its **Relative** Prin. Triad, the IV.

Ex. 76.
IV—II.



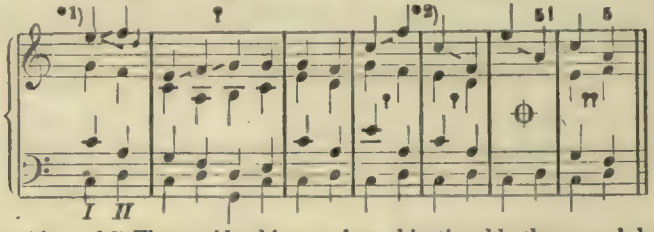
1*) **Compare Ex. 73—9.**

This Progression is to be regarded as almost tantamount to a ***Repetition***, because the Chords are Parallel (simply different forms of the same Class). Hence, greater freedom is allowed here, and in all similar cases, than in any other connections, excepting ***actual*** Repetitions.

This accounts for the wide skip in Soprano in Nos. 4 and 5, and even justifies No. 6, where a wide skip is made from the Chord-Fifth (75 b). It also excuses the Pos. of the Fifth of the II (No. 7) which is barely possible in any other connection (94 d).

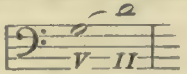
b. By the Tonic Triad: a **Foreign Progression.**

Ex. 77. I—II.



*1) Ex. 74, Note *1). — *2) These wide skips are less objectionable than usual, because both tones (*f*—*e*) are *Principal* steps of the Scale.

c By the remaining Prin. Triad, the V.

This Progression (V—II) is the counterpart of Ex. 68 (V—IV) because the IV and II are Parallels, and in each case the V does not progress as it should, to a *Tonic* Chord (81 b). Nevertheless, the Progression V—II, although at variance with one of the vital principles of Harmony, may be more readily effected than the former, on account of the relation of a Harm. Degree which the Triads represent 

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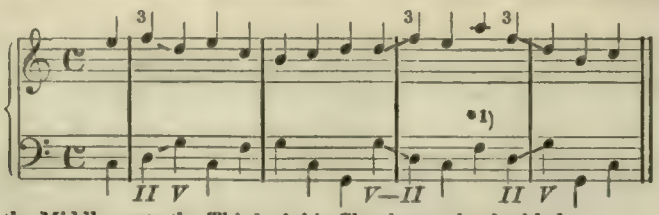
The first measure of the following example shows the most rational connection, similar to Ex. 68—4, 5.

Ex. 78. V—II.

*1) This Soprano is wrong. Only when the V progresses to a Tonic Chord, does it have the effect of a *Dominant* Chord. In this measure it sounds like the I of *G*-major, and the *f*♯ in Soprano (instead of *f*♯) is therefore extremely disagreeable. When the *f* is introduced with a skip from below, as in the first two measures, the impression of *G*-major is weakened. — *2) Here the incorrect progression of the Leading-tone (*b*), added to the Position of the 5th (94 d), renders the false impression of the Key still more palpable. —

99. The following Melody illustrates the predominance of the Position of the Third in the II.



*1) In adding the Middle parts the Third of this Chord must be doubled.

Exercise ten.

Fundamental principles.

The VI is a Tonic Chord, the II a Subdominant or 2nd class Chord, and the III a Dominant Chord. —

The II and IV are more closely related than the other Parallels. —

The Position of the Fifth in the II is objectionable. —

The downward tendencies of the 4th and 6th Steps must be respected in all Subdominant Chords. —

A skip *downward* to the Leading-tone is often justifiable. —

A Subordinate Triad can not progress to *its own* Principal. —

The V should progress to a Tonic Chord, not to the II or IV. —

The Submediant Triad, VI. (See 92.)

100. a. The best Position is that of the **Third.**

b. *The* **Octave**-*Position is forbidden!*

c. Third or Root may be doubled. **Ex. 38a.**

101. The Progressions of the VI are exhibited in the following **Examples**, in the order of their preference:

a. The **Normal Progression** (to the II).

Ex. 79. VI—II.

b. To the V (54c): **Foreign Prog.** (80).

Ex. 80. VI—V.

c. To the IV.

Ex. 81. VI—IV.

*1) The skips in Soprano in this and the following measure are excusable, because neither tone is sensitive (75 a, b), and because the Triads are so closely allied in their constituent tones (two of the three Intervals being common to both Chords) that the Progression is somewhat like a Repetition. Compare the treatment of Ex. 74 and Ex. 76. — *2) Here the first tone in the skip is a Fifth. — *3) In each of these last two measures there is an irregular duplication in Sopr. and Alto (*e*, and *a*).

d. To its own **Relative,** the I. Forbidden Progression. See Ex. 75.

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102. The VI may be introduced (preceded) by the other Triads, in the following order:

a. By its **Relative,** the I (Comp. Ex. 76).

Ex. 82. I—VI.

*1) As in Ex. 81, note *1).

b. By the II; an **ascending** Harmonic Degree. (Comp. 61.)

Ex. 83. II—VI.

*1) The Soprano is unnatural, because it stumbles *beyond* the expected half-tone progression, *f*—*e*, (as in the measure before). The 4th and 6th steps should proceed **diatonically** downwards, whenever they can.

c. By the V. **Foreign Prog.** —

Ex. 84. V—VI.

d. By the IV.

Ex. 85. IV—VI.

*1) Ex. 84 must not be regarded as a contradiction of the principle explained in 84 b. It must be remembered that the VI, as Relative of the I, is also a *Tonic* Chord (92), and therefore quite as apt to follow the V, as the I itself. This might be called a *"Deceptive"* Progression — (V—VI, where V—I is expected). — *2) Ex. 83, note *1). —

The Mediant Triad, III.

103. This Chord lies most remote from the Tonic centre, and is therefore the weakest, least frequent, and most embarrassing of all the Triads. See 48; Ex. 72 a; 92. — It is never used as an independent Chord, but merely as an intermediate "passing" Chord, in the following connections.

104. The III may progress:

a. to the VI (the **Normal Progression**): and

b. to the IV, *i. e.* the *nearest Prin.* Triad. (Foreign. Prog.). —

105. It may be preceded:

a. by the I (because the I can progress to *every* Chord, — 52);

b. by the VI (an ascending Harm. Degree, — compare Ex. 83); and

c. by its *own* Principal Triad, the V.

106. The Position of the III depends upon the Chord which *follows* it.

a. *Before the IV*, the III stands in the Position of the *Fifth* (exceptionally in the Pos. of the *Third).*

b. *Before the VI*, the III stands in the Position of the *Third.*

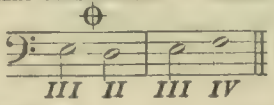
c. The Triad which *follows* the III *always takes the Position of the Third.*
Thus: $\overset{5}{\text{III}}$—$\overset{3}{\text{IV}}$ or $\overset{3}{\text{III}}$—$\overset{3}{\text{IV}}$; and $\overset{8}{\text{III}}$—$\overset{3}{\text{VI}}$.

Ex 86.

From the I: into the IV; into the VI.
From the VI: into the IV; into the VI.
From the V: to the IV; to the VI.
IV VI
IV VI III VI
IV VI
Exceptional:

107. a. From this it is seen that the III has no connection whatever with the II. The Progression would be *Foreign* (neighboring Roots), and *both Chords are Subordinate.* In this case the II can *not* be used as substitute for the IV (92). — Ex. 86, No. 4 is doubtful, notwithstanding the relation of a Harm. Degree, because there are too many weak Chords in direct succession (See 50 f). —

b. The Foreign Prog. of the III into the IV (104 b) is more favorable and common than its Normal Prog. into the VI.

c. It displays an advantage of the Foreign Prog. which must not be overlooked, namely: the convenient *proximity* of the Chords (lying side by side in the Scale., in consequence of which the Bass part makes a smooth progression. — Where there is a choice between the upper and lower neighboring Chords, there is always some important consideration to decide the *direction*. Thus, the II lies as near to the III in the Scale as the IV does ·  but the progression into the former is out of the question, — as has been seen.

108. The 7th step of the Scale, as Fifth of the III, is not to be regarded as a genuine Leading-tone. As is shown in Ex. 86, its progression is generally diatonically *downwards*, — invariably so when the IV follows, in which case it lies in the Soprano, and can not progress to the Tonic on account of parallel fifths with the Bass. This eccentric action of the characteristic tone of the Scale is a striking proof of paragraph 103. —

Exercise eleven.

*1) To be worked out with the Teacher. — *2) 96. — *3) Position of the Third. See 68. — *4) Pos. of the Third. 100 b. — *5) 106 a. — *6) 106 c. — *7) 106 b. —

Fundamental principles.

The best Position for every Triad is that of the *Third;* but especially for the Subordinate Triads. —

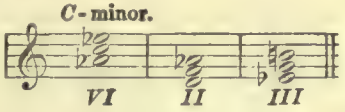
The Octave-Position of the VI is forbidden.

In the III the Leading-tone usually progresses diatonically downwards.

The Subordinate Triads
in the Minor mode.

109. **The Intervals of these Triads are** determined by the Harmonic Minor scale (Ex. 70), **from which they are derived, and are as** follows.

Ex. 87.



110. **The VI is a major Triad, the II a diminished, and the III an augmented Triad (see 34). The latter two are Discords,** (although only three-tone Chords), **because they contain respectively a diminished and an augmented Fifth** (30 a). **Therefore their consideration must be deferred until the next Division.**

111. The VI is treated, in Minor, the same as in Major; excepting in its connections with the II and III, (Ex. 79, 83, and 86) which are regulated by the rules of Discords.

Review 87 a, b. —

Exercise twelve.

*1) Exercise 7, note *1).

The Period.

112. The next larger form of musical composition, after the Phrase, is the Period. This is the conjunction of *two* Phrases of similar length and character. Each Phrase has its own Cadence, and the two Phrases represent the relation of Question and Answer (*Thesis* and *Antithesis*). The first Phrase, called the "Antecedent", has a Cadence which is *rhythmically* as strong as the Perfect Cadence, but *harmonically* and *melodically* incomplete, so that the continuation of the musical thought into a second Phrase is rendered possible and necessary. Imperfect rhythmic interruptions of this kind are called Semicadences, and can be made in a great variety of ways.

The second Phrase, called the "Subsequent", constituting the end of the Period, has the *Perfect Cadence*. Compare 63.

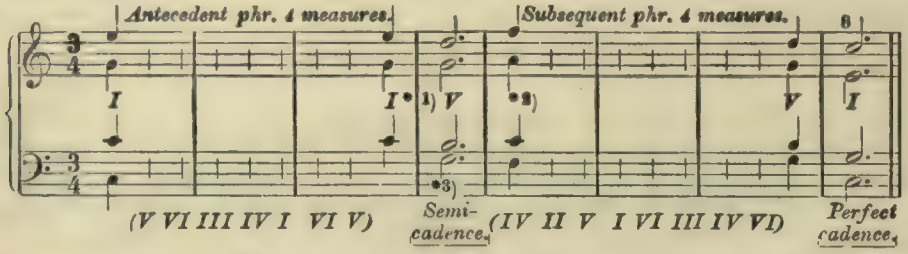
113. A Semicadence coincides **rhythmically** with the Perfect Cadence, in falling upon an *accented* beat of the 2nd, 4th, or 8th measure, but differs from it *harmonically*. As a rule, *any combination of firm Chords* (only excepting the Perfect Cadence itself, and the unstable III) will constitute a Semicadence. But the most common and appropriate Chord for the Semicadence is the V; preceded by the I or any other suitable Chord (IV, II. VI).

A "Cadence" embraces at least *two* Chords, and often more; but the *second* (or last) one, that which occupies the *accented* beat, is called the "Cadence-Chord".

114. The Subsequent Phrase begins upon the same beat of the measure as the Antecedent, and the two Cadences fall upon corresponding accents. —

The following Example is the outline of a Period of 8 measures, in $^3/_4$ time, with the Dominant Semicadence:

Ex. 88.



*1) This Semicadence, I—V, is harmonically the reverse of the Perfect Cadence (V—I) and therefore constitutes the most consistent Antithesis to the latter that can be found. This is also the case in Bass *a* of Exercise 12, and in most of the Periods that follow. The V may, however, be preceded by any other *good* Chord (113. — A Semicadence upon the IV is heavy, and therefore seldom used; its Relative, the II, although a Subordinate Chord, is better. — The I can be employed as Semicadence-Chord, but *not in Octave-Position* Comp. 68. Exercise 12, Bass *c*). It is not very good, however, as it furnishes too little contrast with the Perf. Cadence. Its Relative, the VI, is somewhat better. — The III, as already intimated, is too weak for such a prominent and important place. — The Scholar can easily substitute these different forms of the Semicadence for the one given in Ex. 88, and judge of their comparative effect and appropriateness. —

*2) Here the unnatural Chord-Progression V—IV (Ex. 68) is turned to account at a point where the narrow relation of Chord to Chord is overbalanced by the broad relation of Phrase to Phrase. The Triads pertain here to their separate *Phrases* more directly than to *each other*, and their lack of connection rather aids than interferes with the Form, in heightening the effect of the interruption where the Phrases are separated. Ex. 58 is a similar illustration of the relation between "Chord-Progression" and formal "Structure".

*3) This longer note is necessary for the *Cadence-Chord*, which, in order to *interrupt the Rhythm*, must embrace two or three beats, according to circumstances (see 62 a). The length of the Cadence-Chord depends upon the accent it occupies, and whether the Antecedent Phrase began upon the accented or unaccented beat (Comp. the last Chords of Ex. 54 a, b, and c). The longer it is, the *heavier* or *stronger* the Cadence.

Exercise thirteen.

Complete Ex. 88, in A♭-Major. And point out the erroneous *Chord-Progressions* **in the following incorrect Bass:**

The Form?

Also the erroneous *Positions* and *melodic progressions* in the following:

Also the *general* errors in the following.

The Time?
Cadences?
Form?
Chords?
Positions?
Duplications?
Consecutives?

The Teacher is recommended to work out the second of these given Basses (in which the *harmonic* progressions are correct) with the Scholar, at the blackboard — of course, *after* the errors in Position have been pointed out by the pupil.

Fundamental principles.

The Subordinate Triads in Minor are derived from the Harmonic minor scale. —

The Semicadence marks the end of the Antecedent Phrase: (in other words, of *any* Phrase which is not complete in itself). —

Any firm Chords, with a rhythmic interruption, will constitute a Semicadence. —

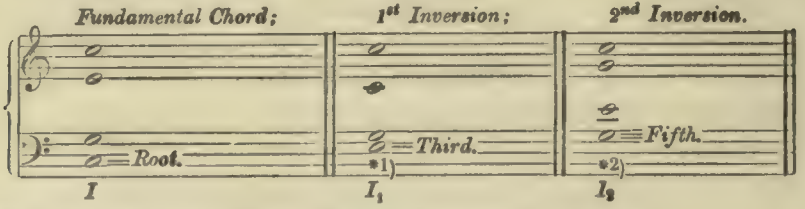
The best Semicadence-Chord is the V. —

The Inversions of the Triads.

115. **"Inverting" a Chord means, simply, placing some other Interval than the Root in the lowermost part. Thus the Triads, which have three Intervals, may appear in three different shapes, as regards the condition of the Bass, namely:**

1st, as original **Triad** or fundamental Chord, with the **Root** in Bass;
2nd, as **First Inversion**, with the **Third** in Bass; and
3rd, as **Second Inversion**, with the **Fifth** in Bass.

Ex. 89.



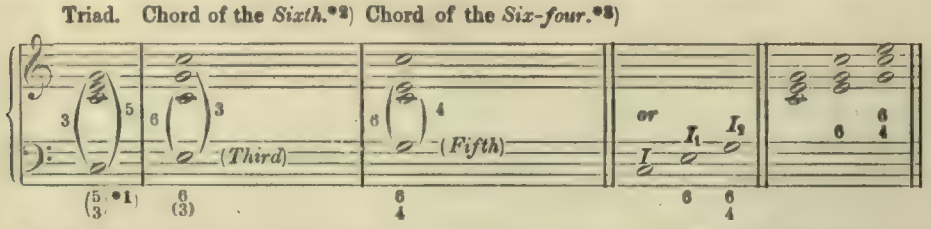
*1) Spoken: "Tonic triad. 1st Inversion"; or more conveniently "One-one".
*2) Spoken: "Tonic triad, 2nd Inversion"; or more conveniently "One-two".

116. a. The word "Inversion" applies, then, to the ***lowermost*** part (Bass), just as the term "Position" applies to the ***uppermost*** (Soprano); excepting that the Inversions are numbered "first" and "second", instead of taking the distinctive title "of the Third" and "Fifth", as in the Positions.

b. It is obvious that merely changing the Chord-Interval in ***Bass*** can no more change the fundamental Harmony than the same procedure in *Soprano* (45). Hence, the Chords in Ex. 89 are all designated "The I", because their Root is in each case C, the 1st Step of the Scale, though at one time there is ***c***, at another ***e***, and finally ***g*** in Bass. In other words, the Inversions are merely ***new forms*** of the fundamental Chords. Still, the alteration in Bass affects the ***quality*** and ***character*** of the Chord to a still higher degree than the change of Position in Soprano, as the Bass is essentially a ***harmonic*** part.

117. In order to distinguish the Bass notes as Third or Fifth of the Chord, from the Bass note as Root, certain figures are attached ***below*** them, which indicate the interval or intervals from the Bass note to the attendant upper tones, and define the ***shape*** and general ***denomination*** of the Chord. Thus:

Ex. 90.



*1) The figures (intervals) 5 and 3 are always understood, unless contradicted by 6 and 4 respectively; therefore they are usually omitted. The figure interval 8 signifies duplication, and is usually understood in Triads.

*2) So called in analogy to the figuring in Bass, — 6.

*3) Agreeing with the Bass figuring $\frac{6}{4}$. —

Exercise fourteen.

Attach the names (in Roman numerals) to the following Chords, as indicated in the first measure.

When there are no Figures, the Bass note is a Root. When marked 6, the Bass note is a Third, the Chord is a 1st Inversion, and the Root, and name, is found a 3rd *below*. When marked $\frac{6}{4}$, the Chord is a 2nd Inv., and the Root, and name, is found a 5th below. See 35.)

And indicate the following Chords in *figured Bass notes*, as above: *D*-Major I_2 — III — IV_1 — V_2 — II_1 — VI — I_1 — VI_1 — III_2 — IV — II_2 — V_1 — VI_2 — III_1 — IV_2 — II; and the same Chords, in *reversed order*, in *G♭*-Major.

Section 2nd. The Chords of the Sixth.

Ex. 91.

*1) These Chords will be limited principally to the *Major* mode, at present, for reasons intimated in 110. Only those Examples in which neither the II nor the III, or their Inversions occur, can be applied to the *Minor* mode also.

118. The first Inversions appear most naturally and most frequently as substitutes for their respective fundamental Triads. The Third being a lighter Interval than the Root (49 b), it follows that the 1st Inversions are lighter and more flexible than Triads. Therefore they are best adapted for smooth and graceful harmonic successions, in moderately animated *tempi*.

The Principal Chords of the Sixth.

119. The chords of the Sixth are classified, like the Triads, as ***Principal*** and ***Subordinate*** Chords. The Prin. Chords of the 6th are, naturally, the first Inversion of the three Prin. Triads.

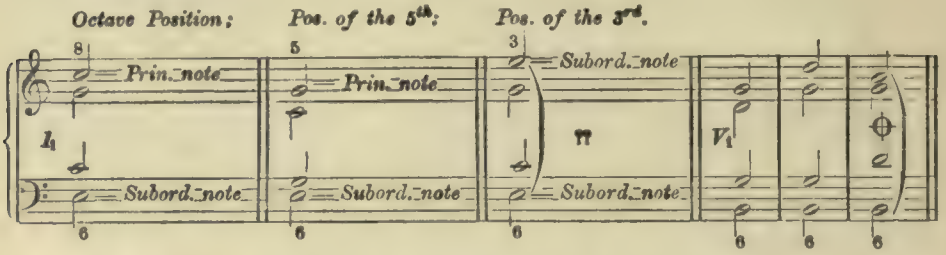
120. a. The best Position for every Chord of the 6th is that of the Octave (*i. e.* Root in Soprano, — see 120 d), because the Root, when taken from the Bass, should be given to the next best part (Soprano), in order that the quality of the Bass tone as *Third* (instead of *Root*, as the ear is always apt to assume) may be unmistakably defined, and the Chord be distinctly recognizable.

b. In the *Principal* Chords of the 6th, however, the Root, *being a Prin. tone of the scale*, can lie in a middle part without endangering the identity of the Chord, in which case the Soprano may take the Fifth.

c. The Position of the **Third** should be avoided, because it doubles an inferior Chord-interval, in the *outer parts*.

d. *The* **Position** *of a Chord is always reckoned from the Root*, no matter what Interval the Bass part chances to have. See 45 **a, b, c.**

Ex. 92.



121. a. As a rule *it is best to double the Principal tones of the Scale.*

b. But in Chords of the Sixth *almost any tone* (excepting the Leading-tone) may be doubled in order to obtain smooth voice-progression. It is *least* desirable to double the Bass notes (*i. e.* the Third) in *Principal* Chords of the 6th.

c. *No Chord-interval is ever omitted*, in any Inversion.

122. a. The inverting of a Triad is attended by the following advantages: It facilitates the combinations of the Chords to such a degree that almost any of the foregoing forbidden Progressions become possible, when either or both Chords are inverted;

b. As seen in 121 b, it simplifies the rules of duplication;

c. It simplifies the rules of melodic progression so that successive Positions of the 5th or 8th are allowed when one (especially the second) Chord, or both Chords are Inversions; and wide skips to the 5th in Soprano are less objectionable than in Triads;

d. It conduces to the melodic smoothness and beauty of the Bass part, which has precisely the same melodic choice of Root, Third or Fifth as the Soprano has. Compare the Basses in the following Exercises with those of the preceding ones.

123. The following tables exhibit the **Progressions** of the three Prin. Chords of the 6th into **Triads**, in the order of preference. The Pupil is again referred to 58.

Ex. 93 I.

Ex. 94.
V_1.

Ex. 95.
IV_1.

*1) Major and Minor (Comp. Ex. 91, *1)). — *2) 122 c. Appendix A, b. — *3) 59 d. — *4) Major only. — *5) See Ex. 78 and compare 122 a. — *6) Rule IV a (46). —

124. The **Introduction** of these chords is effected according to the same principles as their Progressions, and can be found and studied by simply ***reversing each measure*** of the above Examples (*i. e.* playing the second Chord ***before*** the first). But particular attention is called to the following exceptional cases:

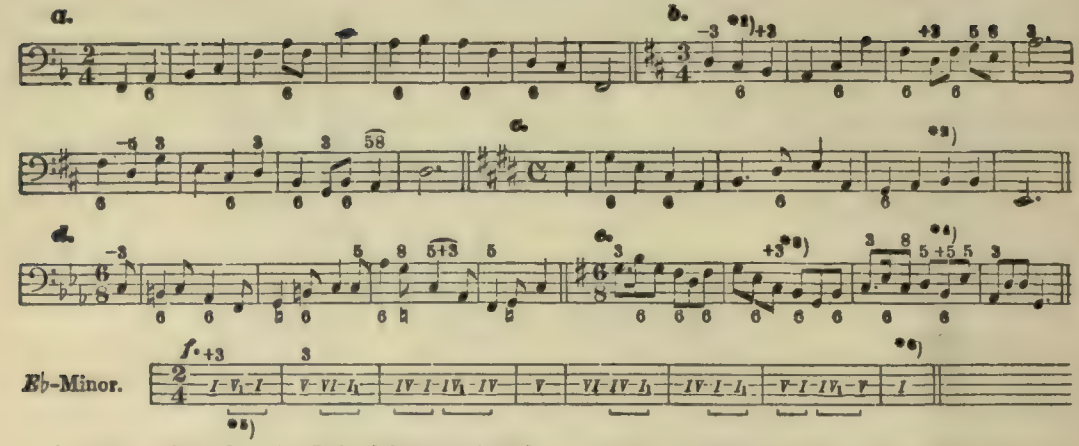
Ex. 96.

*1) These measures show under what circumstances the Position of the 3rd of the I_1 may be not only admissible, but necessary. As already stated, the 4th step should progress *diatonically* downward whenever it is possible (particularly in Soprano). — *2) See Ex. 75, and compare 122 a. — *3) Ex. 73—3, note. — *4) See Ex. 68, and compare 122 a. —

125. From the foregoing Examples it is apparent that Chords of the 6th prefer to progress and to enter *smoothly*, *i. e.* with as few wide skips as possible in the *Bass* part. Compare the first 2 or 3 measures with the last ones, in Exs. 93, 94, 95. —

Exercise fifteen.

A. Basses. The pupil is again reminded that the figures *below* the Bass part are always reckoned upward from the given **Bass note**, irrespective of the quality or denomination of the Chord; whereas the figures *above* the Bass refer to the *Position*, and are reckoned from the **Root.** 120 d. See directions given at Exercises 6 and 8. — **N. B.** Complete the Soprano of each Bass, before filling out the Middle parts.—Define the "form" of each Bass (Phrase or Period).



*1) 120 a. -- *2) 80 b — *3) Rule IV b (46), and 120 b. — *4) 122 c. — *5) Exercise 9, note *5). — *6) Value? —

B. Transpose (at the Piano, at sight) the following two fragments (separately) into *every other Major* Key:

Observe closely the Positions and Chord-progressions, and the transposition will be an easy task.

Fundamental principles.

The best Position for a Chord of the 6th is that of the *Octave.* —

The Pos. of the Fifth is admitted in a *Principal* Chord of the 6th. —

Any Interval may be doubled, — excepting the Leading-tone.

No Interval is ever omitted in an Inversion. —

Inverting a Chord facilitates its combination with other Chords, and simplifies its treatment in very many respects. —

The Subordinate Chords of the Sixth.

The only good Sub. Ch. of the 6th is the II_1. The VI_1 and III_1 are extremely rare.

126. These Chords are limited almost exclusively to the use of the Octave Position; because their Roots, being Subord. tones, *must*, in order to be recognizable as Roots, lie in a prominent part. 120.

127. The exceptions are:

a. The II_1, which may take the *Pos. of the Third* (best when the three upper parts lie close together), and

b. The III_1, which, *when followed by the IV*, may (like the III itself) take the *Pos. of the Fifth*. 106a.

These exceptions are rare, and not obligatory!

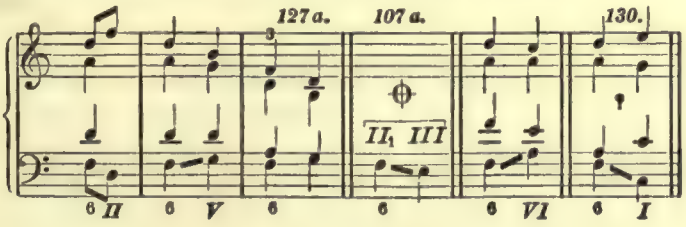
Ex. 97.

*1) Admissible; compare 108. —

c. In Repetitions, of course, *any* Position can be taken: 47. —

128. The **Progressions** of the three Sub. Chords of the 6th to Triads, are as follows:

Ex. 98. II_1.



Ex. 99. VI_1.

Ex. 100. III_1.

129. The **Introductions** will be found, as before (124), by playing each of the above measures in reversed order. The following exceptional cases deserve special attention:

Ex. 101.

130. These Examples again show, as indicated in 125, that the movements of Chords of the 6th are chiefly regulated by the *proximity of the* Bass notes. In this respect they differ somewhat from the Triads, whose harmonic actions are determined, as has been learned, almost entirely by Chord-relations. In Exs. 93, 94, 95, 98, 99, 100, the best progressions were seen to be (not considering the first measure of each, which is merely Chord-repetition) those in which the Bass moves *diatonically*, upward or downward. The skip of a *third* upwards (in Bass) is only possible with the best Chords, (neither with the VI_1 nor III_1). The skip of a *fourth* is very doubtful; only the I_1, IV_1 and II_1 can make it, — and these, only in one direction, and not without difficulty. As this is owing to the comparative weakness of the Chords of the 6th, it follows that it applies more strictly to the Subordinate 6ths than to the Principal ones. This is shown in Exs. 99 and 100.

Exercise sixteen.

*1) 126. — *2) This line denotes that the Soprano note is to be *held*. — *3) 127 b. — *4) 46, Rule IV, b. — *5) Also write out this Bass (alone) in any *six* other Major Keys. —

Fundamental principles.

Subordinate Chords of the 6th must take the Octave Position. —
The movements of Triads are regulated chiefly by "Chord-relation" —
The movements of Chords of the 6th, by the proximity of the Bass notes. —

Consecutive Chords of the Sixth.

131. The Progression of a Chord of the 6th into another Chord of the 6th (instead of into a *Triad* as in the foregoing lesson — 123, 128,) is one of the most graceful, natural, and common Chord-combinations, and can be effected with the greatest ease, especially when the Bass moves smoothly, as explained in 130.

Here the advantage of Inversion is again exhibited in a very striking degree; for when, as in successive Chords of the 6th, *both* Chords are Inversions, wider skips are admissible in Bass, and the Chords are connected without regard to their relations (see 122 a). For instance: the *Triad*-Progressions V—IV—III —II are entirely wrong; but as Chords of the 6th (V_1—IV_1—III_1—II_1) the succession is unquestionably correct. Thus:

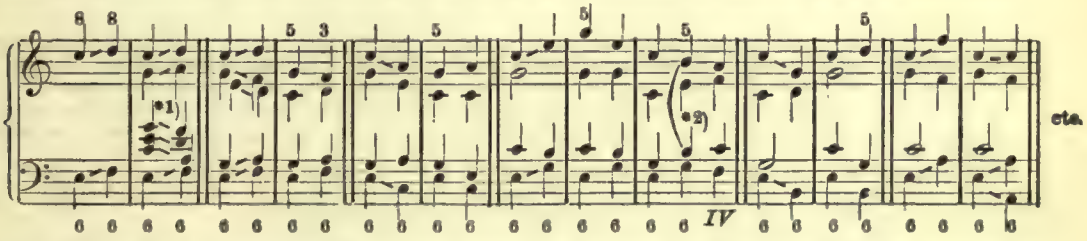
132. a. The Soprano generally moves *in sixths Parallel with the Bass,* each Chord taking the 8ve-Position. Occasional exceptions (as given in 120 b, and 127) are admissible.

b. The rule of smooth voice-progression must be strictly observed, and attention must be paid, especially, to Rule III (46).

c. At least *one* part should move *in contrary direction to the others.*

133. The following table illustrates the connections of the I_1 with other Chords of the 6th, in the order of preference, and each measure can be played backward or forward (as shown in 124).

Ex. 102.
I_1.

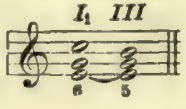


*1) Either one of these three Tenor progressions can be taken; and the same with the two Alto progressions in the following measure. — *2) Comp. Ex. 97—4.

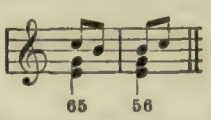
134. The connections of the other Chords of the 6th are made in the same manner, and can easily be found by the Scholar, alone, or under the supervision of the Teacher.

Triad and Ch. of the 6th on the same Bass tone.

135. According to 130, in which the proximity of the Bass tones was seen to be the best guide for the Progression of a Ch. of the 6th, it is apparent that the latter will connect most readily with that Triad which has the *very same Bass tone.* Thus, the I_1 and III (Bass tone *e*):



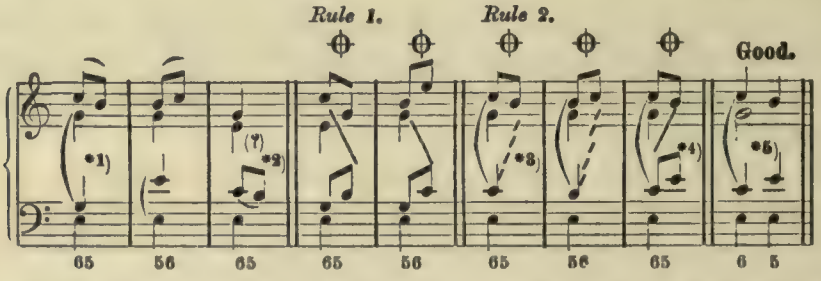
136. Chords which are so nearly alike as these, (with only one note of difference, and that one diatonic,) are very often connected during *one single beat*, instead of using, as has heretofore generally been the case, a separate beat to each Chord. Thus:



The Chord of the 6th may *precede* or *follow* the Triad, at option. The figure 5 denotes the Triad, and is *not* understood in this case, because of the 6 which accompanies it.

137. Rules: 1stly, the notes of difference, 6 and 5 (*c* and *b* in this instance) must be connected in *one and the same part* — usually in the *Soprano;* 2ndly, when connected on a single beat, the first of these notes should not be *doubled*. For example:

Ex. 103.
1.



*1) The three lower parts simply *hold* their tones. Comp. *3) and *4). — *2) The notes of difference are less suitable in a middle part than in the Soprano, which should have the advantage of every such melodic Figure. — *3) A dissonance, which is not to be considered yet. — *4) Too unquiet. — *5) It must be understood that the second rule (above) only applies to the *rapid* connection upon a *single beat*. When each Chord occupies a separate *full* beat, as here, there is time to apprehend each one independently, as in ordinary progressions.

138. The other Chords of the 6th make this connection in the same manner.

Ex. 104.
*1)

*1) As usual, separate measures. — *2) These two couplets are also perfectly correct, but will not appear in the following Exercise, because they involve Chords which have not yet been explained. (See 37 and Ex. 135). — *3) One or two exceptions of this kind are justifiable. Observe the Bass-figuring. —

139. a. The rapid diatonic passing notes in this connection (*i. e.* the notes of difference), whether they lie in Soprano or in a middle part, *must run on diatonically in the same direction*, if the following Chord contains the required tone. Comp. 12 e, No. 1 Thus.

Ex. 105.

*1) Here the Soprano is right, because it fulfils the impulse of the rapid diatonic notes, although contrary to the *natural* tendency of the Leading-tone.

*2) These two measures are very awkward.

b. If, however, the succeeding Chord should *not* contain the required tone, then the rapid part is more likely to *turn*, than to progress in the same direction with a skip, or to remain on the same tone. Thus:

Ex. 106.

*1) Compare measure 1. This Soprano, besides being awkward and unmelodious, makes parallel 5ths with the Bass part, which are quite as objectionable as if the second Eighth-note (♪) were not between; because they represent the full beats, and unaccented fractions of beats have not sufficient force to interrupt the impression of consecutive 5ths. The same rule applies also to intercepted Octaves.

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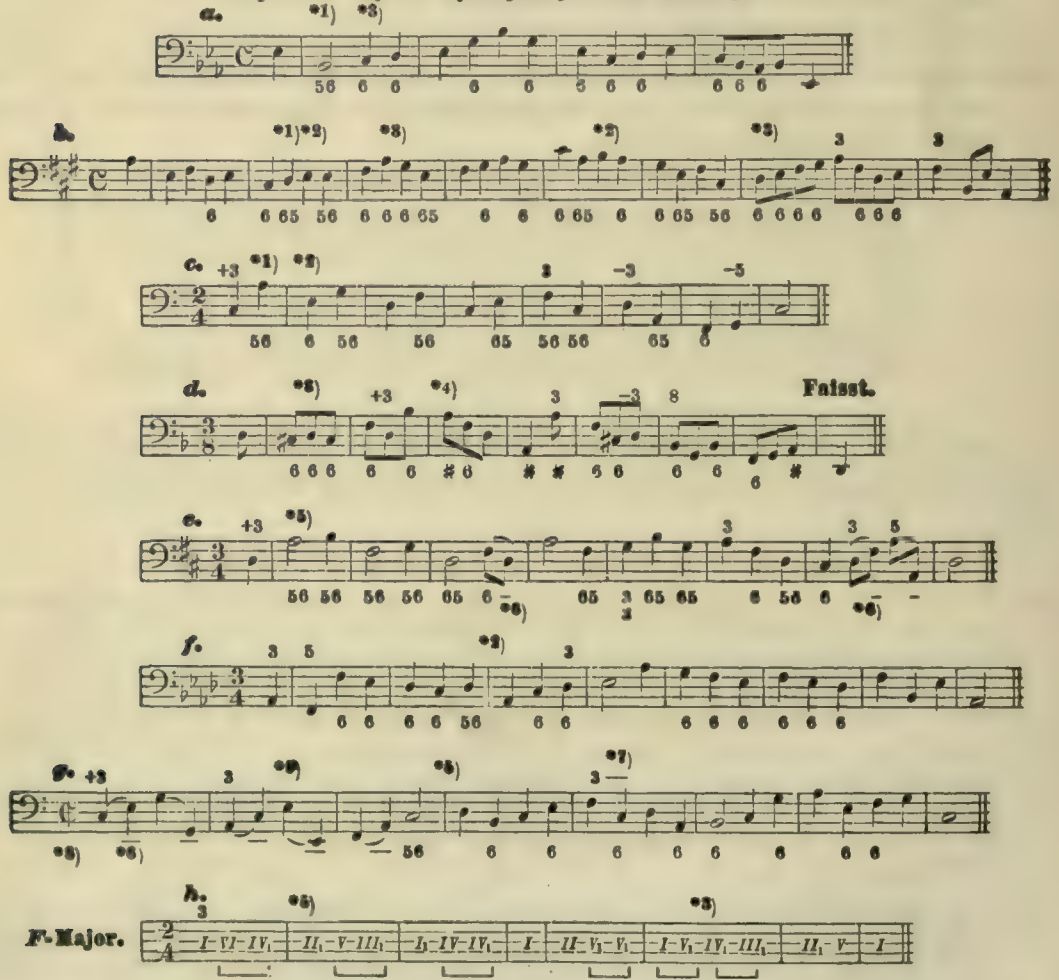
140. In connection with the manner of treating the lower parts in the above Examples (see Ex. 103, note *1) it may be stated, that when a tone is common to two or more successive Chords, it may be written as *one* note of corresponding value, (in favor of diversity of Rhythm, and quiet voice-progressions), instead of being re-struck at each Chord; especially when in a middle part (Ex. 107 a). This must be done, however, with strict regard to the rules of Rhythm and metrical accentuation, as explained in 4 b. and 66. *Heavy* (long) notes can only occupy *accented* or *full beats*. It is wrong in principle to tie an *unaccented* beat to the following accented beat; and still worse, to tie an unaccented *fraction* to the following full beat. *A note (or Chord) should not extend into or beyond a beat which is rhythmically* heavier *(more accented) than the one where the note or Chord began!* For illustration:

Ex. 107.

*1) The line below the second Bass note signifies that the upper parts are to simply *hold* their tones. Compare the second beat of the 6th measure, in which, on the contrary, the Position changes — *2 It is not altogether incorrect to tie the 2nd and 3rd beats in *Triple* Time, because the prolongation extends into a *weaker* beat. Still, it should be avoided. See Exercise 7, note *2). — *3 It is not advisable to make the common tone more than 2 or 3 beats long; therefore the Tenor of the last two measures is preferable to this one. —

Exercise seventeen.

Complete the Soprano before filling out the middle parts.



*1) 137. — *2) 139 a. — *3) 132 a, and c. — *4) Rule IV b (46). — *5) 139 b. — *6) Ex. 107, note *1). *7) The line denotes that the Soprano note is to be held. — *8) This Bass illustrates the diversity of Rhythm explained in 140. — *9) 106 a, and c. —

Fundamental principles.

In successive Chords of the 6th the Soprano usually runs in 6ths with the Bass; and one part must move contrary to the others. —

The couplet 65 or 56 must be placed in some single part, generally Soprano; and the first tone must not be doubled. —

Rapid diatonic tones run on in the same direction. —

It is desirable to diversify the rhythm of the parts. —

A tone should not extend into or beyond a stronger beat than where it began —

Section 3rd. The Six-four Chords. (Ex. 90).

141. These Inversions stand upon the **Fifth** of the fundamental Triad, as shown in 115. The quality of this Chord-interval, as defined in 49 c, has been repeatedly tested in the foregoing Examples (paragraph 59 b, 75 b, etc.), and its quality and harmonic characteristics are most apparent, and exert the greatest influence upon the Harmony, when it lies in the ***Bass part***, as supporter of its Chord.

142. Consequently,

a. Six-four Chords are not employed *independently*, but must be placed in certain **connections** with other and stronger Chords, as accessories of the latter, as **Embellishments**, or as Intermediate ("Passing") Chords;

b. They can not occur in direct succession, because of the successive Fifths in Bass (compare 59 b); and

c. They can neither enter nor progress with a skip (in the Bass part, of course)

d. For this reason, also, they are not classified, like Triads and Chords of the 6th, as "Principal" and "Subordinate" Chords. The only distinction that can or need be made is as follows·

Ex. 108.

*1) See Ex. 91, note *1).

*2) The I_2, **when accented** (as is commonly the case), is Semi-independent. The rest are all dependent, and seldom occupy accented beats. The weakest $^6/_4$ chord is the V_2.

143. a. The Soprano-Position of a $^6/_4$ Chord does not enter into consideration, being always regulated by the Chord with which it chances to be connected. The Soprano usually has either the interval 6 or 4 (Third or Root of the Chord) — very rarely the Bass note.

b. The Bass note is always doubled, (as just intimated, *not* in Soprano but in a Middle part).

In this Section particular care must be taken not to confound the terms "Bass note" and "Root"!

The Combinations of Six-four Chords.
First Connection.

144. In general, the Six-four Chords can appear in **three** different connections with other Chords.
Firstly: a $^6_4$ Chord may *enter from* or *progress to* the Triad upon the same Bass note:

The following Example illustrates the I_2 in this connection. The pupil is again referred to 58.

Ex. 109. I_2

*1) Major and Minor. — *2) The figures $^5_3$ denote the Triad, and are necessary on account of the figures $^6_4$. As is seen in measures 1 and 2 the Soprano almost always takes either the melodic line 565 or 343 (but compare the last three measures), and the Bass tone is doubled in one of the middle parts. When this connection is prolonged, as in measures 4 and 5, the Soprano may change from one row of tones to the other, to avoid monotony; this change is usually made after $^5_3$, not after $^6_4$; wherever the 6th is, the 5th will follow (as in Ex. 103), and similarly, the 4th is followed by the 3rd.

145. This connection of the $^6_4$ Chords is not allowed in the following rhythm.

because it occasions a Rhythmical Halt to repeat a Bass tone from an unaccented to an accented beat, whether the *Chord* changes or not. This rule supplements the rule given in 66, which see.

146. a. Not all of the six $^6_4$ Chords can appear in this connection. The following table shows that, besides the I_2 (Ex. 109), only the IV_2, II_2 and VI_2 can be combined with the Triads of their respective Bass notes. With the V_2 and III_2 it is impossible.

Ex. 110a.

*1) The V_2 can not be used in this connection on account of the false melodic progressions involved (46, Rule IV a, b.). — *2) With these Accidentals the $^6_4$ Chord is not a V_2, but the I_2 of *G*-major or minor. *3) Here it is a IV_2 in *D*-minor. — *4) There is no legitimate Triad upon the Bass note of the III_2 (37).

b. The connection of a $\frac{6}{4}$ Chord with the *Chord of the 6th* upon the same Bass note is possible, but weak and rare. It is most common in rapid rhythm, as in Exs. 103, 104.

Ex. 110b.

*1) The line denotes that the foregoing interval is to be *held*. —

Second Connection.

147. Secondly: a Six-four Chord may appear in connection with *any* Chord of the same Root:

This is merely Chord-*repetition*, therefore *all* the rules are nullified, even 142c. See 47. *All* of the $\frac{6}{4}$ Chords can be used in this way. For instance:

Ex. 111. *1)

*1) This Example is exceptionally a *continuous* 8-measure Phrase, and not a series of separate measures, as heretofore. — *2) As the Bass part moves from one Chord-interval to another, it constitutes occasionally a $\frac{6}{4}$ Chord, as here. — *3) The momentary incompleteness of the Chord is of no consequence in rapid rhythm. — *4) These lines are explained in Ex. 107, note *1). —

148. It need not be inferred from the above Example that the $\frac{6}{4}$ Chords in this 2nd Connection must necessarily be short. They can just as well occupy *full* beats, as subsequent Examples and Exercises will show.

The following extracts are further illustrations of these two connections. (Connection 1st at *a*, Connection 2nd at *b*).

Ex. 112.

*1) These repetitions in Bass (contrary to 145) will be explained in due time.

Third Connection.

149. Thirdly: a Six-four Chord may be combined with any good Chord upon the next higher or lower Bass note.

This "diatonic" connection, like the 1st one, is not equally applicable to *all* of the $\frac{6}{4}$ Chords (146). With the I_2 and V_2 it is excellent, but with the others more rare, and dangerous to the Key.

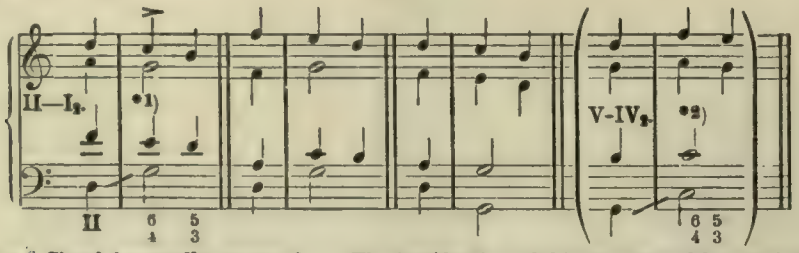
Ex. 113.

The most of these measures can be reversed (as shown in Ex. 96).

150. a. In comparing these three connections it appears, that in the 1st case the **Bass part** is stationary (Ex. 109), in the 2nd case the **upper** parts retain the same tones, and in the third case, where there is an actual harmonic movement in Bass, it is limited to a **single step.**

b. One important exception to these rules is found in the combination II—I_2, which involves a *skip* in Bass (see 142 c).

Ex. 114.



*1) The $\frac{6}{4}$ Chord is usually accented. — The justification of this exceptional harmonic progression is to be sought in the fact that the $\frac{6}{4}$ Chord is only a transient interposed Chord between two closely related Triads, thus: II (I_2 V. Comp. Ex. 78. — *2) This progression is much more rare. It represents V (IV_2) I. — Appendix, E, g—k.

Exercise eighteen.

*1) The *Position* of a Chord is always reckoned from the *Root!* 120 d. — *2) Ex. 107, note *1). — *3) Rhythm $\overset{\frown}{\text{♪}}\ \overset{\frown}{\text{♩}}$, in analogy to the foregoing measures. — *4) Any unusual arrangement of the Bass figures (like $\frac{6}{4}\ \frac{4}{6}$ here) has no other object than simply to denote the *course* of the upper parts: (the interval 6 will be followed in the same part by the 4th). The Rhythm is as at *3). — *5) The line through the figure 6 signifies that the corresponding note is *raised* by an accidental, and refers, in this case, to the Leading-tone $c\sharp$. Compare Exercise 9. — *6) See 66 b. — *7) After working out these Basses, the pupil is to analyse them, defining the Connection of each $\frac{6}{4}$ Chord with the Chords which precede and follow it. —

Fundamental principles.

Six-four Chords are weak. —

They can only occur, legitimately, in connection with Chords of the same Bass tone, same Root, or neighboring Bass tone. —

The Soprano-Position is optional. The *Bass tone* is doubled. —

It is unrhythmical to repeat a Bass tone over the Accent. —

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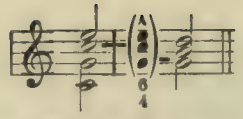
151. It has been seen, in the above Examples, that these three connections, when possible at all, can be applied equally well ***before*** or ***after*** the $\frac{6}{4}$ Chord, as Introduction or as Progression. Hence it is obvious that the connections may be associated, so that the $\frac{6}{4}$ Chord enters in one manner and progresses in another. In this way certain harmonic ***groups*** arise, according to the preference which the separate Chords evince for certain combinations.

152. One of the commonest forms results from introducing the Six-four Chord as *Repetition* and progressing into the Triad upon the *same Bass tone* (associating Connections 2nd and 1st).

Thus:  In this group the $\frac{6}{4}$ Chord almost always occupies an **accented** beat (or, at least, the accented fraction of the beat), and represents the same kind of intercepted Chord as in Ex. 114. Thus:

Ex. 115.

See 146.

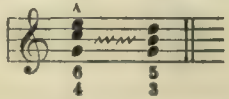
It is more usual to retain the same Soprano note in the $\frac{6}{4}$ Chord (as in Nos. 1 and 2) than to exchange voices (as in No. 3), as it indicates the connection in which the Chord enters. —

153. There is here an apparent violation of the rhythmical rule enunciated in 66, because the $\frac{6}{4}$ Chord upon the Accent is a repetition of the preceding, unaccented, Chord. This exception is accounted for on the ground that Six-four Chords are so vague a form of their fundamental Triads, that they do not represent and suggest the latter, but seem, especially when *accented*, to indicate the Triad of their *Bass tone*.

154. a. Therefore a Chord may always be repeated over the accent without producing a Rhythmical Halt, *if it becomes the* second *Inversion.*

b. Hence it is, also, that a $\frac{6}{4}$ Chord, when occupying an accented beat, evinces a decided preference for the progression into the Triad upon the same Bass tone, no matter in which connection it was introduced.

When a $\frac{6}{4}$ Chord is *unaccented*, it matters but little in what connection it enters and progresses.

c. This progression is only obligatory with the *Tonic* $\frac{6}{4}$ *Chord* (I_2), which, *when accented, must progress into the V:* 

But it is not obliged to make the progression *at once*; sometimes quite a number of Chords in the other connections (same Root or neighboring Bass tone) intervene. Thus:

Ex. 116.

Exercise nineteen.

*1) Note to Ex. 115. — *2) Plagal Cadence; see 155. — *3) The irregular rhythm in the first two measures of this Bass, caused by the longer note (𝅗𝅥) upon the weaker 2nd beat, is made good, partly by the continuation of the rhythm in the upper parts, and partly by the *repetition* in the following measure, which corroborates the figure and equalizes the measures. Hence the general principle: "*Repetitions and Sequences justify most Licences.*" But the repetition must, of course, be symmetrical; *i. e.* it must occur at corresponding parts of the measures. Thus.

*4) 120 a. — *5) 137. — *6) Exercise 18, note *4). — *7) The Soprano note is held. — *8) Play the *Bass* and *Soprano* of this first Phrase, *at sight*, in every other Major Key. — Each Bass when completed, is to be analysed as in the preceding Exercise. —

The Plagal Cadence.

155. The Plagal Cadence is a short succession of Chords (generally not more than two in number) affixed to the Perfect Cadence, to make the relaxation of motion more gradual. To prevent the effect of the Perf. Cad. from being counteracted by this continuation of the rhythm, it is necessary *to retain the Tonic note in Soprano* (or both Soprano and Bass) during the plagal ending. Therefore the latter must consist of such Chords as contain the Tonic, *i. e.* the IV or VI. The most common of these is the IV, which, by its natural breadth, deepens the impression of repose, and confirms and strengthens the Perfect Cadence. Like every other Cadence, it must close upon an *Accent*, and for this reason it can only appear in *Compound* Time (3 b), the Perfect Cadence falling on the Primary, and the Plagal Cadence upon the Secondary accent (3 c).

Ex. 117.

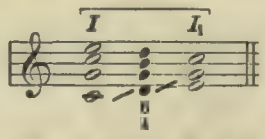
Fundamental principles.

A Chord may be repeated over the bar or Accent, when it becomes a *second Inversion*. —
The Tonic $\frac{6}{4}$ Chord must, *when accented*, progress sooner or later into the V. —
Repetitions and Sequences justify Licences. —
The Plagal Cadence is generally made with the Subdominant Chord. —

Six-four Chords as Passing-chords (142 a).

156. When an **unaccented** $\frac{6}{4}$ Chord enters diatonically, it is very apt to *progress diatonically also, in the same direction.* It then becomes a **Passing-chord,** in one of the three following relations:

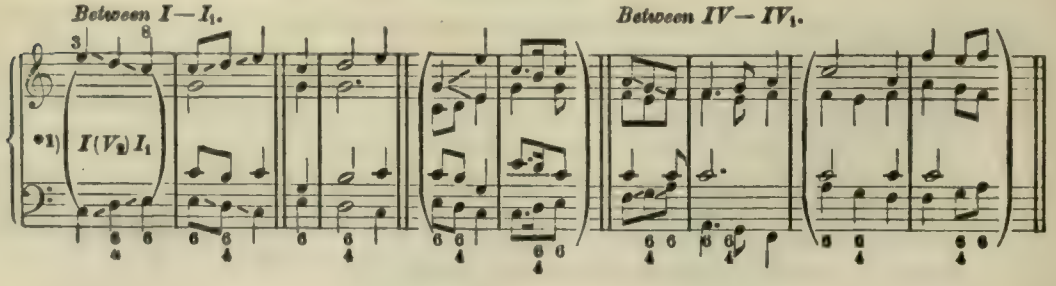
157. a. Firstly. The $\frac{6}{4}$ Chord appears as diatonic Passing-chord *between a Triad and its first Inversion.* Thus



Not between a Triad and *any* Chord of the 6th, but a Triad and *its own* Sixth. This progression is very common, and may be made in *either direction* (Triad first or Sixth first), in *any rhythm*, and at any part of the measure.

b. The Soprano usually takes the *same notes as the Bass, but in contrary order* (Ex. 118—1, 2, 3), in conformity with former rules: Triads in the Pos. of the Third, and Sixths in Octave-position. The exceptions are rare, and will, as usual, be indicated.

Ex. 118.



*1) The first 9 measures are the same in Major and Minor. — *2) From here on, only in Major. *3) Compare Ex. 78.

158. a. Secondly. The $\frac{6}{4}$ Chord becomes a Passing-chord *between two different Chords of the Sixth.*

This progression is very good, and is possible in either direction; but it is comparatively rare, because there are so few places in the scale where it is practicable.

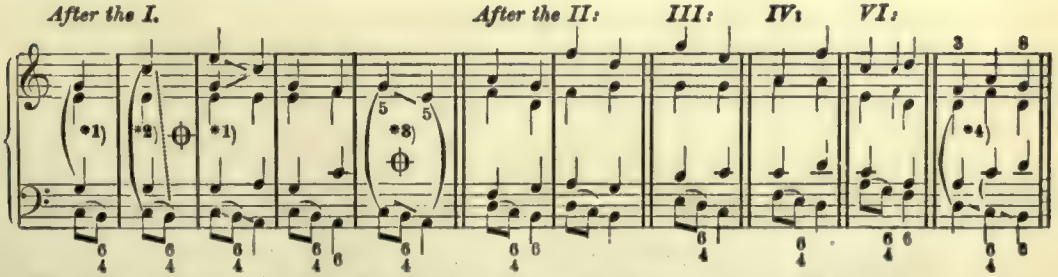
b. The Soprano generally runs in parallel 6$^{\text{ths}}$ with the Bass.

Ex. 119.

159. a. Thirdly. The $\frac{6}{4}$ Chord appears as *diatonically descending Passing-note in Bass*, following a *Triad*, and progressing in the same direction into another Triad, or into a Chord of the Sixth. Thus:

b. This harmonic group is analogous to Ex. 103. The Chords are so nearly alike that the combination is usually made on a ***single beat***, and the ***Bass tones***, which are here the notes of difference, should not be doubled. Compare 137.

Ex. 120.

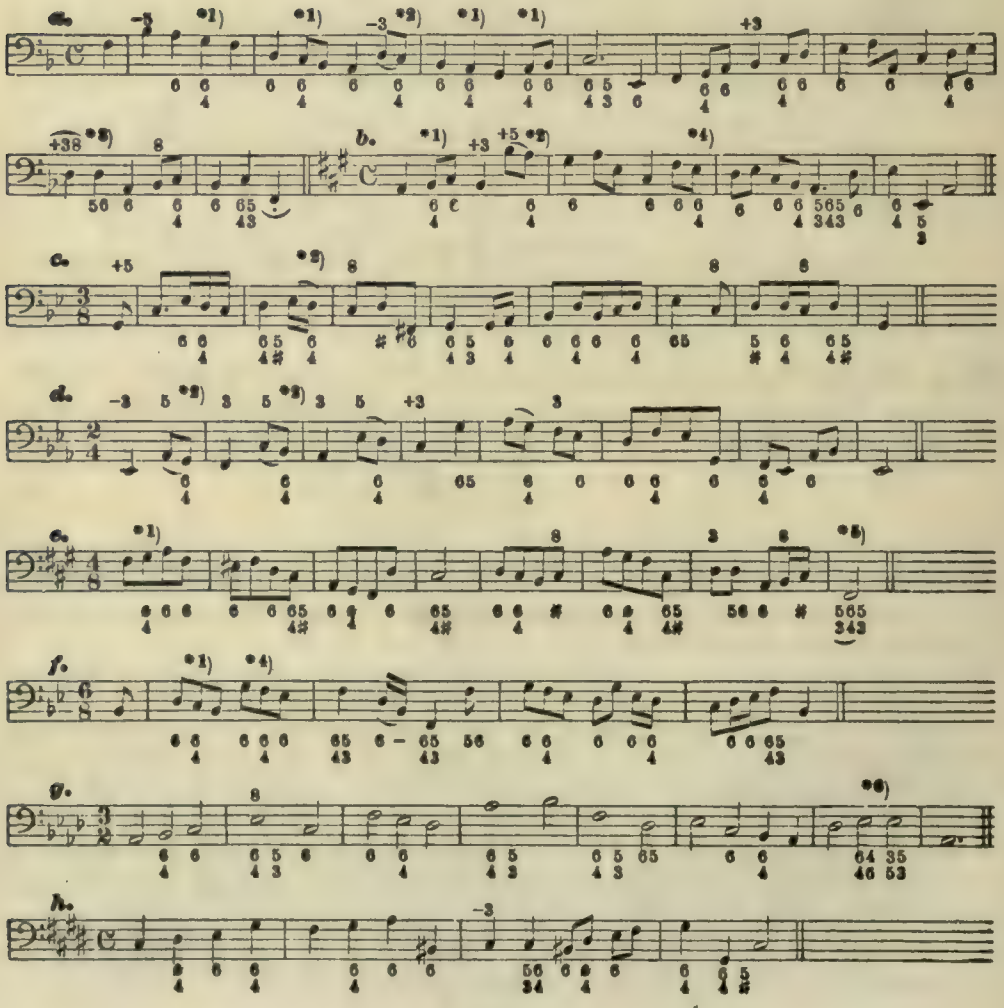


*1) Either the 3$^{\text{rd}}$ or 5$^{\text{th}}$ of the Triad is doubled. See Ex. 103, measure 1. — *2) Ex. 103, measure 6. — *3) Compare Ex. 106, note *1). — *4) Compare Ex. 103, note *5).

Another illustration of this connection:

Ex. 121

Exercise twenty.



*1) See 157 a, b. — *2) See 159 a, b. — *3) 137. — *4) See 158 a, b, — *5) Here the weaker notes (♪) occupy the *first* half of the measure, instead of the unaccented *second* beat, on account of the Plagal Cadence, which must end with a heavier note (155). — *6) Exercise 18, note *4). — The Basses are to be analysed, as before.

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160. Before concluding this Division, attention is directed to the importance of the ***Tonic*** $^{6}_{4}$ ***Chord*** (I_2) ***at the Semi-cadence and Perfect Cadence,*** where it is very commonly used in connection with the V (compare 154 c), partly in order to ***embellish,*** and partly to ***lighten*** the Cadences. Thus:

Ex. 122.

*1) Compare with Ex. 88, bar 4. —

Further Examples will be found in the two preceding Exercises.

Exercise twenty-one.

Transpose (at the Piano, at sight) the first of the following Examples into every other *Major* Key; and the second, in the same manner, into every other Minor *and Major* Key.

Closely observe the *Positions* and the *Bass figures.*

Division B. Discords.

161. A Discord is a harmonic body which contains one or more dissonant Intervals. Review 25 b, c. —

162. The simplest Dissonance is the interval of a **Seventh,** which arises naturally from adding one higher 3rd to the Intervals of the Triad. See 29 a, 30 a. The result is a four-tone Chord, named **Chord of the Seventh,** after the Dissonance which it contains (see 32).

163. The Chords of the 7th are the ***fundamental four-tone Chords,*** corresponding to (and derived in a certain sense from) the Triads, or fundamental three-tone Chords. But they can not be classified

in the same way as the latter, on account of the peculiar obligations connected with their Dissonance, in fulfilling which, their original independence as fundamental Concords is to a certain degree sacrificed.

164. A Dissonance has, as the term indicates, a harsh sound which the ear will only accept on condition that it be reasonably brief, and that it be justified by the intervals which precede and (especially) follow it. By itself, a Dissonance is meaningless and unsatisfactory, and urgently demands a progression which will fulfil its tendencies and obligations. This impression of Incompleteness and Expectation characterizes the dissonant Intervals, and imparts an activity to them which is of great advantage in animating the Harmony.

The Classification of the Discords.

165. a. The Discords are divided into **Grades** or **Classes**, representing their proportionate degrees of importance, and consequent frequency. These Classes are determined by **the distance of their Roots from the Tonic, in ascending Harmonic Degrees (perfect fifths).**

Ex. 123.

b. This table shows that there are only *four* fundamental Chords of the Seventh, or, in other words, Discord Classes. The Discords which stand upon the other three steps of the Scale (4^{th}, 1^{st}, 7^{th}) are *derived* from these, in a manner which will be seen later on.

c. The Tonic-Class is not numbered the "First", *because it is exclusively composed of Concords. No Tonic Chord can become a Discord*, without losing its chief Tonic characteristic, Repose, and becoming a member of one of the four *Discord* Classes!

d. Hence, the **Dominant** Chords constitute the **First** Class, because they rest upon the **first** perfect fifth above the Tonic note. And, similarly, the 2^{nd} Class have the 2^{nd} perf. fifth above the Tonic, as fundamental tone, and so on.

e. The Third and Fourth Discord Classes are so rare that they hardly enter into consideration in Harmony. They are exclusively dissonant.

f. Therefore it is apparent that the Tonic Class, (exclusively consonant) and the 1^{st} and 2^{nd} Classes (both consonant and dissonant) represent together virtually the **three Elements of the whole System of Harmony.** **See 51 and 220.**

The Resolution of a Dissonance.

166. The Progression which satisfies the requirements of a Dissonance (164) is called its **Resolution**, and the Chord which follows a Discord and affords such satisfaction is the **Resolving Chord.**

167. a. Every Dissonance in Music is resolved **diatonically**, in the majority of cases downward: Ex. 124 a. The progression with a skip is *very irregular*, and can only be justified in Repetitions: Ex. 124 b.

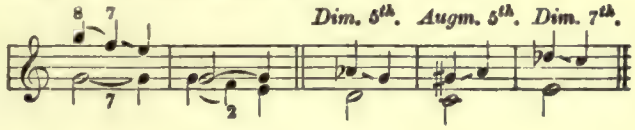
b. The Dissonance of a Seventh cannot progress upward: Ex. 124 c.

c. The interval of a 7^{th} should not progress into an Octave Ex. 124 d

d. No dissonant Interval should ever be doubled: (50 d).

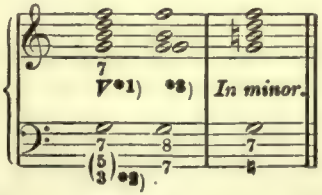
Ex. 124.

168. Dissonances very often prove to be a modification of some consonant Interval, and the manner or direction of their Resolution depends chiefly upon the nature of the modification. Augmented intervals have an upward tendency, diminished ones progress downward. The Seventh of a Chord must be regarded as a depression or contraction of the Octave, and therefore it is always resolved downward. The 2^{nd}, as inversion of the 7^{th}, derives its progression from the latter.



Section 1st. The First Class of Discords (Ex. 123).

A. The Chord of the Seventh upon the Dominant.



*1) Spoken: "Dominant-seventh", or "Five-seven".
*2) Ex. 90, note *1), — *3) 170 b.

169. The Chord of the Dominant-seventh is obtained by adding another (higher) 3rd to the Intervals of the Dom.-Triad (162). The new Interval, the Seventh, is the Dissonance, requiring resolution (164). The Chord of the Seventh is employed in place of the simple Triad V, whose natural tendency towards the Tonic is strengthened by the addition of a Dissonance. The construction and treatment of the Chord is the same in Minor as in Major, with the usual exceptions (Ex. 71).

170. **a.** There is no choice of Position, *i. e.* the Soprano is optional (55). The Seventh may lie in *any* part.

b. The Fifth may be omitted, and the Root doubled.

c. The Seventh progresses diatonically downward, and is not to be doubled (167 d).

171. **a.** The resolution of the $\overset{7}{V}$ into the I (or Inversions) will be called Normal, because it corresponds to the Normal Progression (61 b).

b. The resolution into the VI (the Parallel of the I) will be called Deceptive (see note to Ex. 84).

c. Both the Normal and Deceptive Resolutions are Regular, because both lead into Tonic Chords (81 b).

Ex. 125.

*1) Separate measure, as usual. Alike in Major and Minor. — *2) See 167 c. This error may be termed "Unequal Octaves", and is quite as disagreeable as actual parallel Octaves. The simplest way to avoid them is *not to double the Resolving-tone* of the Seventh, excepting when the two tones enter in opposite directions, as at *3), which is admissible. The error is most palpable in measure 7. — *4) The parallel 5ths in the middle parts are also "Unequal", because the first one is diminished and the second one perfect. For this reason they are not altogether wrong, as the rule only applies strictly to successive *perfect* 5ths. The admissibility of such doubtful progressions depends almost always upon the *second* interval, and when, as in the above case, the *second* 5th (a — e) is perfect, the consecutives had better be avoided by leading the Tenor from *b* to *c*, as in measure 9. —

The Introduction of the $\overset{7}{V}$.

172. Dissonances must not only be resolved, but some consideration must also be taken of the manner in which they *enter*.

173. The most natural and regular modes of introducing a Seventh are:

a. Diatonically from above (*i. e.* the Seventh is preceded by the *next higher* tone), and

b. by Preparation (*i. e.* preceded by the *same* tone, as Interval of some other Chord).

c. On the contrary, the Introduction diatonically from below, or

d. with a Skip must be regarded as a licence, the admissibility of which depends principally upon the quality and grade of the Chord. In *all* Chords of the First Class these irregularities are allowable. For illustration:

Ex. 126. *1)

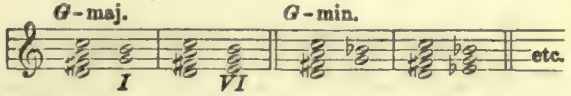
*1) In Major and Minor. — *2) See Ex. 125—5. — *3) The skip to the Seventh from *above* is much more objectionable than from below, because the part must continue in the same direction (contrary to Ex. 9), in order to resolve the Seventh

174. From this it may be deduced that it is only proper to skip to an Active tone which requires resolution, in the *direction opposite to its tendency*. For example: the skip may be made in any part *upward* to any Seventh, to the Dominant Leading-tone (6th Step in Minor), and to all Diminished tones, because these resolve *downward*; and the skip may be made *downward* to the Leading-tone, and to all Augmented tones, because they resolve *upward*. Thus:

See Ex. 73, note to measure 3. —

Exercise twenty-two.

A. Write out the $\overset{7}{V}$ of every major and minor Key, with its two Resolutions, on one stave, as follows:



B. Transpose (at the Piano — at sight) the following fragment, into every major and minor Key:

Closely observe the *Chord-Progressions* (Bass) and the *Positions* (Soprano), and the transposition will be easy.

C. Basses.

(From here on, the 3 upper parts must be made *together*, as it is not practicable to define the Soprano alone, as heretofore, on account of the Dissonance).

*1) 157 a, b. — *2) 170 b. — *3) 160. — *4) Ex. 126 d — 2. — *5) Exercise 18, note *4). — *6) Ex. 120. *7) The upper parts may all be held. See also Exercise 19, note *3). — *8) Ex. 107, note *1). — *9) Exercise 9, note *5). — After working out these Basses, they are to be thoroughly analysed, with special reference to the manner in which the Dissonance is introduced (173), and the mode of its Resolution (171).

Fundamental principles.

Discords are divided into Classes, agreeing with the distance of their Roots in Harmonic Degrees above the Tonic. —

Tonic Chords are exclusively consonant. —

The Seventh of a Chord is resolved diatonically downward, and is not doubled. —

The Fifth may be omitted, in Chords of the 7th. —

Unequal octaves are wrong Unequal 5^{ths} are wrong when the second one is perfect. —

The Introduction of a 7th is regular when it enters diatonically from above, or is prepared. —

All rational Licences are admissible in First-Class Chords. —

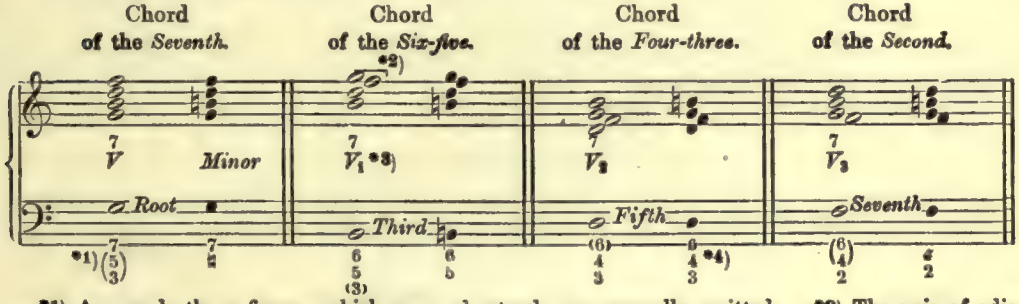
The Inversions of the Dominant-Seventh-Chord.

175. All chords are inverted in the same manner, *i. e.* by substituting some other Chord-Interval for the *Root*, *in Bass* (115). A chord of the 7th (4-tone chord) has, obviously, three Inversions, as follows:

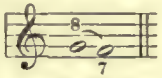
1st Inversion, } as before { with the *Third* in Bass;
2nd Inversion, } as before { with the *Fifth* in Bass;
3rd Inversion, with the *Seventh* in Bass;

The Inversions are figured and named exactly according to 117. Thus

Ex. 127.



*1) As usual, those figures which are understood, are generally omitted. — *2) The pair of adjacent notes which invariably appear in the Inversions of 4-tone Chords, always represent the Intervals 8 and 7, that is, Root and Seventh; thus



In other words, the *upper* of these two tones is the *Root*, and consequently defines the Chord. Therefore the names of the three Inversions merely indicate the intervals from the Bass note to this pair of tones. $\frac{6}{5}$, $\frac{4}{3}$, and 2. — *3) Spoken: "Five-seven-one": first the *Name* or *Root* of the Chord, then its *Species*, and lastly the number of its Inversion. — *4) In Minor, fuller figuring is necessary, on account of the Leading-tone, which has an Accidental.

176. The Inversions are lighter and more flexible than the fundamental Chord, and occur frequently as modified forms or substitutes for the latter. The 1st Inversion is perhaps the most common (118).

The 2nd Inversion is weak, like the $\frac{6}{4}$ Chords, *but not in the same degree*. The 3rd Inversion is the most dependent, but is very unique and effective, because of the prominence which the Dissonance assumes in the Bass part. Therefore it is a very useful Chord.

177. The Inversions are treated, in general, just like the Chord of the Seventh. The exceptions are:

a. *No Interval should be omitted* (121 c);

b. The Inversions are limited almost entirely to the Normal Resolution (into the I and I_1). The Deceptive Resolution (into the VI) is attended with difficulties naturally incident to these weaker Chord-forms.

c. The Introductions, on the contrary, agree exactly with those of the fundamental Chord. Review 173.

Hereafter the Examples will, wherever practicable, embrace both the Introduction and Resolution of the Chords.

Ex. 128. *10)

*1) $\frac{6}{5}$ is equivalent to $\frac{6}{6\,5}$, the interval 8 being usually doubled. — *2) $\frac{6}{4}$ = $\frac{6}{4\,3}$, the interval 4 being doubled. — *3) See Ex. 125, note *4). These Unequal 5ths are good. — *4) Either the I or I_1 can follow the $\overset{7}{V}_2$. The I is best, as it obviates doubling the resolving-tone *e*. — *5) The upward progression of the 6th Scale-step in Soprano is justifiable here. — *6) It is obvious that no other Chord than the I_1 can follow the $\overset{7}{V}_3$ on account of the resolution of the 7th in Bass. — *7) The Unequal 5ths in Bass and Alto are doubtful, but not altogether wrong. — *8) A $\frac{4}{3}$ Chord is treated in general the same as the $\frac{6}{4}$ Chords, but somewhat less strictly. The skip in Bass is not absolutely wrong. Compare 142c. — *9) These Chords are too weak to occur in direct succession. A $\frac{6}{4}$ Chord can never be employed in the *independent capacity of a direct "Resolution"*. 142a; 177b. — *10) In Minor as well as Major, excepting where the 6th step moves upward. —

Further illustrations of the $\overset{7}{V}$ and Inversions:

Ex. 129.

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178. a. The rule of the Rhythmical Halt (145) is subject to one other and final exception, as follows. An unaccented ***Bass note*** may be prolonged over the bar or Accent, on condition that it becomes a *Dissonance* at the following accent (or full beat); for this change in the quality of the tone is sufficiently striking to compensate for its inactivity. Thus:

Ex. 130.

b. **In summarizing the *rules of Rhythm* as applied to *Chord-progressions*, it appears then, that:**

A Chord may be repeated over the bar or Accent when it becomes a 2nd Inversion (154a); and

A Bass tone may be repeated over the bar or Accent when it becomes a Dissonance.

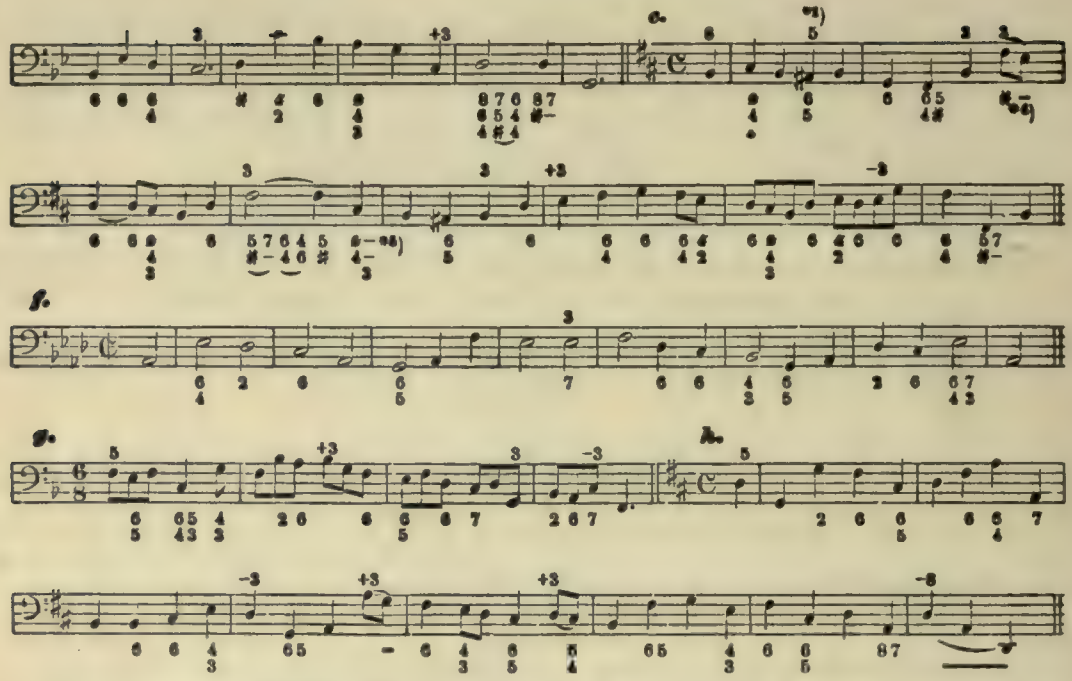
Exercise twenty-three.

A. Write out the $\overset{7}{V}_1$ of *F, G, B♭, D, E♭, A, E, A♭, D♭, B, G♭ Majors*: the $\overset{7}{V}_2$ of *E♭, g♯, b♭, f, c♯, f♯, c, b, g, e, d Minors*: and the $\overset{7}{V}_3$ of *G, F, B♭, D, A, E♭, A♭, B, E, D♭, F♯* Majors, — with their Resolutions, on one stave, as follows:

Afterwards, find these same Chords and their Resolutions *at the Piano*, with the right hand alone, mentally (*i. e.* without reference to the table). —

B. Basses.

(To be analysed as before, after being completed). The Position-figures may be ignored.



*1) The Positions are reckoned from the *Root* / 120 d. — *2) 106 a. — *3) Ex. 128, note *1). — *4) Ex. 107 note *1). — *5) Ex. 128, note *2). —

Fundamental principles.

Inversions are lighter and more flexible, but *weaker* than fundamental Chords. —
In an Inversion, no Interval is to be omitted. —
The Deceptive Resolution of the inverted $\dot{V}$ is objectionable. —
A Bass tone may be prolonged over the bar or Accent, if it becomes a Dissonance.

Irregular Resolutions of the Dominant-7th-Chords.

179. The majority of licences in the treatment of dependent Chords and Intervals appear at **Repetitions**, where, as has been repeatedly shown, all rules are nullified. See 47.

180. The licences which attend such Repetitions are of two general classes, namely:

a. The Resolution of the active tone or Chord is **Deferred** by the interposition of other forms of the **same Chord**, ("modified Repetition"), or by the casual intervention of a **foreign Chord**, ("Digression" or "indirect Resolution").

b. The obligations of the active tone are **Transferred**, in some rational way, to another part, in the same or in a different Register.

181. a. Hence, *when the Chord remains the same*, any *convenient* Interval or Intervals may be interposed between the Seventh and its Resolving-tone. (Deferred Resolution).

b. When the Chord is repeated, it may change its form, its Position, and the disposition of its Intervals to any reasonable extent; whereby the Seventh is likely to be *transferred* from one part to another, without any other restriction than this: being a tone with *downward tendency*, it is most apt, even when the Chord remains the same, to progress to a lower tone.

c. In all of these Deferred Resolutions the Seventh is ultimately resolved, *in the part where it* last appeared.

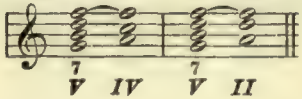
Ex. 131. *1)

*1) Major and Minor. — *2) The 7th moves upward, in apparent contradiction of 167 b; but in reality the *g* is only an interposed Interval of the same Chord, and does not interfere with the ultimate resolution into *e*. — *3) Here another form (Inversion) of the Chord intervenes, before the Resolution takes place. — *4) The 7th is transferred from the Alto to the Soprano, and is resolved in the *latter* part, the one which assumes its obligations. 181 c. — *5) The 7th in Soprano, though transferred to the Bass and resolved there, should progress *downward* to *d* or *b*, and not upward. See 181 b. The following measure is less exceptional, because the 7th in Tenor is taken up by the Bass in the *same register*.

The Passive Resolution.

182. The "Digression" or "Indirect Resolution" (180 a) consists in interposing a *foreign Chord* before the proper Resolution takes place, and is therefore more unusual and dangerous than the above "Deferred" Resolution. The foreign Chord must be reasonably *brief*, and must be in some way connected with the Discord whose progression it interrupts.

183. a. The foreign Chords which intervene between the $\overset{7}{V}$ and its regular resolving Chords are the two Subdominant or Second Class Chords IV and II, in both of which *the Seventh of the Dominant occurs as consonant Chord-interval* (Root and Third respectively), thus constituting a connecting link. For example:



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b. This Chord-progression may be termed a "Passive Resolution" because the 7th, in becoming a consonant Interval, is actually resolved; not by its own act, however, but *passively*, through the other parts. Reference to Ex. 123 shows that this progression is the transition from the Dominant or 1st Class into the 2nd Class, and therefore exactly the reverse of the natural progression into the **Tonic** Class. It corresponds to the irregularity in Ex. 68 and Ex. 78, but is more justifiable, because of the connecting-link which the Seventh affords.

184. The consonant condition thus gained by the 7th does not compensate for the actual regular Resolution. Hence:

a. The Passive Resolution is usually only a Digression *from the Discord and directly back to it* (perhaps in a new form): in other words, the foreign Chord is interposed *between the Discord and its Recurrence.* Thus: $\overset{7}{V}$—(IV or II)—V: or $\overset{7}{V}$—(IV or II)—$\overset{7}{V_1}$ or $\overset{7}{V_2}$. Compare Ex. 68, measures 4, 5.

b. Much more rarely, it is interposed *between the Discord and its resolving Chords.* Thus: $\overset{7}{V}$—(IV or II)—I or VI. Compare Ex. 114, note *2).

c. Rule I. The Seventh must *remain stationary*, *i. e.* in the same part.

d. Rule II. The Seventh should not be doubled or otherwise disturbed, during its transient *consonant* condition.

Ex. 132.

*1) 184 a. — *2) 184 b. — *3) The 7th must remain in the same part, *when the Harmony changes!* Compare 181 b. — *4) The *f* in Alto is wrong, because it doubles the passive Seventh. — *5) These measures, in which the passive 7th changes parts, are exceptional, but admissible, because the tone remains in the same register. —

185. Besides the above Licences there are two other irregularities which are peculiar to the Chord of the Dominant-seventh:

a. The 7th may be resolved diatonically *upward*, when the Bass part moves *parallel with it, in 3rds*; and

b. The Seventh may be *doubled*, when one of them progresses to another Chord-interval, before the other is resolved. Thus:

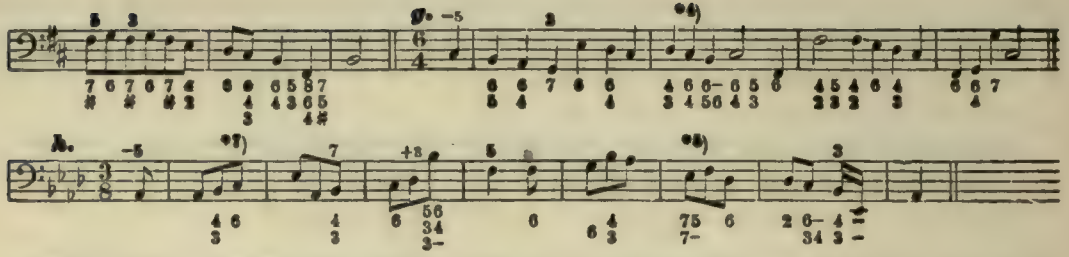
Ex. 133.

*1) Major and Minor. — *2) This licence is limited to the Chords $V_2^7 - I_1$; in no other case would the Bass move with the ascending 7th, in parallel 3rds. It is not to be confounded with the first measure of Ex. 131, where the 7th progresses upwards but *returns* to its resolving-tone. In the above Example the Resolution does not take place in the same part, but is *transferred* to the Bass. — *3) These 5ths are allowed. — See Appendix E, d—f.

Exercise twenty-four.

A. Basses.

(To be analysed, after being worked out, with special reference to the above Licences).



*1) Ex. 131 b. — *2) Ex. 107, note *1). — *3) As usual, the rows of figures indicate the *course* of the parts. — *4) 184 c, d. — *5) Ex. 133 b. — *6) Ex. 120. — *7) Ex. 133 a.

B. Play the following Chord-progressions *slowly*, at the Piano, in *different* Major and Minor Keys. At first, with the right hand alone; afterwards with both hands, in ordinary "open" 4-part harmony. —

$$\overset{7}{V}-\overset{7}{V_3}-\overset{\frown}{I_1} \parallel \overset{7}{V_2}-\overset{7}{V_3}-\overset{\frown}{I_1} \parallel \overset{7}{V_1}-\overset{7}{V}-\overset{\frown}{VI} \parallel \overset{7}{V}-I_2-\overset{7}{V_3}-\overset{7}{V_2}-\overset{\frown}{I} \parallel \overset{7}{V}-IV_1-\overset{7}{V}-\overset{\frown}{I} \parallel$$

$$\overset{7}{V_1}-II_2-\overset{7}{V}-\overset{\frown}{VI} \parallel \overset{7}{V_2}-IV_2-\overset{7}{V_1}-\overset{\frown}{I} \parallel \overset{7}{V_3}-IV-\overset{7}{V_3}-\overset{\frown}{I_1} \parallel \overset{7}{V}-\underset{\frown}{IV_1}-\overset{\frown}{VI} \parallel$$

$$\overset{7}{V_1}-\underset{\frown}{IV_2}-\overset{\frown}{I} \parallel \overset{7}{V}-\underset{\frown}{II_2}-\overset{\frown}{VI} \parallel \overset{7}{V}-IV_1-I_2-\underset{\frown}{V}-\overset{7}{\underset{\frown}{V_3}}-\overset{\frown}{I_1} \parallel$$

Fundamental principles.

When a Discord is *repeated*, it may change its form so that the Dissonance is *transferred*, or its Resolution *Deferred*. —

A Dissonance is always resolved, ultimately, where it *last* appeared. —

The Passive Resolution of Dom. Discords is effected by *Subdominant* Chords. —

If a Seventh cannot move diatonically downward, when the Harmony *changes*, *it must stay where it is*. —

The Passive Resolution is most commonly interposed between the Discord and its *Repetition* (possibly in another form). —

The Dominant Seventh may be resolved diatonically *upward*, when the Bass accompanies it in parallel 3rds. —

B. The Incomplete chord of the Dominant-seventh, or, the *Triad* upon the *Leading-tone* (37).

186. a. The Root is the Interval upon which the identity of a Chord naturally depends; but when **the *other*** Chord-Intervals are of such a nature that they define their Chord beyond a reasonable doubt ***without the Root***, the latter may be omitted without endangering the identity of the Harmony.

b. This is naturally not often the case in *three*-tone Chords, but is quite common in those of *four* tones, and almost obligatory in those with *five*. When applied to the Chord of the Dominant-Seventh the result is as follows.

Ex. 134.

*1) Spoken: "Five-seven, Incomplete". The term "Incomplete" in this Method invariably signifies *"without the Root"*, and is indicated by the 0. — The Inversions are not reckoned from the *actual* Root, but from the apparent Root (the Third of the fundamental Chord). — *2) The Positions also are reckoned from the lowest tone of the *Triad*, exactly as in ordinary Chords. —

187. **a.** The Incomplete $\overset{7}{V}$ is the Triad upon the Leading-tone, with its Inversions.

b. Like the $\overset{7}{V}$ itself, it is alike in form and treatment in Major and Minor. But see Ex. 71

c. It is a *Diminished Triad*, because its Fifth is diminished (34), and therefore a Discord (161), though but a 3-tone Chord. The diminished 5^{th} is the Dissonance.

188. The reasons why this Chord must be regarded as a derivative of the $\overset{7}{V}$, instead of as an independent Chord with the corresponding designation (VII), may be demonstrated as follows:

1^{stly}, because it contains the Leading-tone, which is the chief characteristic of the Dominant harmonies, as Bass tone, or *apparent* harmonic basis (54 a):

2^{ndly}, because its most natural progression (Resolution) is into the I and VI, in which point it corresponds exactly to the $\overset{7}{V}$ (171). This is naturally owing to the tendency of its Leading-tone, and to the coincidence of its Dissonance (the dim. 5^{th}) with the dissonance of the $\overset{7}{V}$:

3^{rdly}, because the comparison of this Chord with the $\overset{7}{V}$ discloses a similarity of effect not to be found or expected between *different* Chords.

189. **a.** The Dissonance, being no longer an *actual* 7^{th}, is not obliged to resolve diatonically downward, but may (especially when approached from below) progress *diatonically upward.*

b. Either the 5^{th} or 7^{th} of the *original* Chord (3^{rd} or 5^{th} of the Triad) may be doubled. When the latter (the Dissonance) is doubled, the two tones generally progress in opposite directions.

c. The best and most frequent form of this, and every other Dim. Triad, is *the Chord of the Sixth* ($_0\overset{7}{V}_1$). — The *Triad itself* is rarely used. — The $\frac{6}{4}$ Chord is better than the Triad, and stronger than other (consonant) $\frac{6}{4}$ Chords. It occurs in the usual three Connections (144 etc.).

d. The Resolutions correspond to those of the $\overset{7}{V}$ complete, *i. e. Normal*, into the I (I_1); *Deceptive*, into the VI; *Passive*, into the IV and II. For example

Chord of the 6^{th} ($_0\overset{7}{V}_1$). Ex. 104—6.

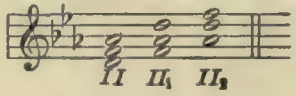
Ex. 135.

Ex. 136.

*1) The Mediant (3rd Step) is very often doubled in connection with these Incomplete Chords, as it conduces to smooth progression. — *2) The Leading-tone may be casually doubled, when each moves *diatonically, opposite* to the other, as here. — *3) The skip from the Dissonance (*f*) is justifiable, but very irregular. Compare *7). — *4) 137. — *5 The Unequal 5ths in Bass and Alto are allowable. — *6) 159 b. — *7) The skips in Bass from the Dissonance, in this measure and the next, are irregular and unusual, but excusable on the ground of 189 a, and the quality of *f* as *Subdominant note* (7 b). — *8) The two successive $_4^6$ Chords (contrary to 142 b) are allowed because one is the I$_2$ (Ex. 108) and the other a *Discord* (189 c). —

The II in Minor.

190. This is also a Diminished Triad, and consequently a Discord (See 110). It belongs properly to the 2nd Class of Chords, as its Root is the Changing-Dominant (Ex. 123), therefore its treatment at this place is premature, but justified by its importance. It resembles the Incomplete ^{7}V in general character and treatment. In structure it corresponds of course to the Major II:



191. a. This Dim. Triad differs from the $_0^7$V in being a *fundamental* Chord, and not a *derivative*. Therefore it is used more independently and more frequently than the former.

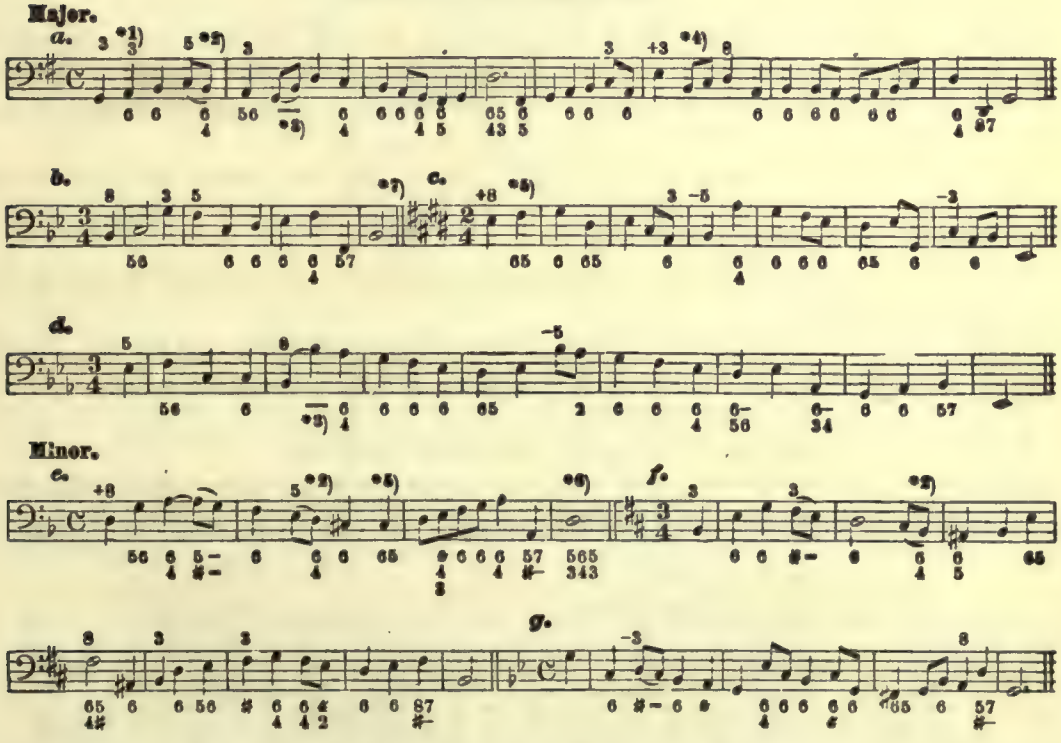
b. Its treatment is very nearly the same as in Major. The Dissonance (dim. 5th) is, at the same time, the *Dominant Leading-tone* (86), and is resolved diatonically downward to the Dominant; consequently, the Resolving Chords will be such as contain the Dominant note, viz. the V, ^{7}V or I. The Passive Resolution into the IV (which contains the Dissonance as consonant Interval) is effective, as transient progression.

c. As before, the best form is the *Chord of the 6th* (189 c). The Triad itself is *very rare*. The 2nd Inversion is, as Discord, stronger than ordinary $_4^6$ Chords.

Ex. 137. (Minor).

*1) Compare Ex. 136, note *8). In *Major*, where the II_2 is a Concord, this succession is palpably incorrect. —

Exercise twenty-five.



*1) Ex. 134, note *2). — *2) Ex. 120. — *3) Ex. 107, note *1). — *4) 106 a. — *5) Ex. 103. — *6) Rhythm ♩ ♩ 𝅗𝅥. — *7) The *Bass and Soprano* of this Phrase are to be transposed and played at sight in a number of different Major Keys. —

Fundamental principles.

The Triad on the Leading-tone, in Major and Minor, is an *Incomplete* $\overset{7}{V}$, and is treated accordingly. —

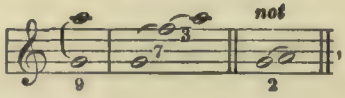
There are two legitimate Diminished Triads in Harmony: the $\overset{7}{V}$ Incomplete, and the II in Minor. —

The best form of a Diminished Triad is its *first Inversion.* —

The diminished Fifth is generally resolved diatonically downwards. —

C. The Chord of the Ninth upon the Dominant.

192. **a.** This five-tone Chord (see Ex. 29) is obtained by adding another higher third to the Intervals of the $\overset{7}{V}$.

b. The new Interval is a **Ninth** from the Root, and its most important characteristics are: firstly, that, being related most directly to the Seventh (upon which the last third is erected) it must always be *at least 9 tones* (a 7th and a 3rd) *from the Root*, and therefore *can never be contracted to a 2nd.* Thus: 

, and, 2ndly, that it cannot appear *without the Seventh.* Consequently,

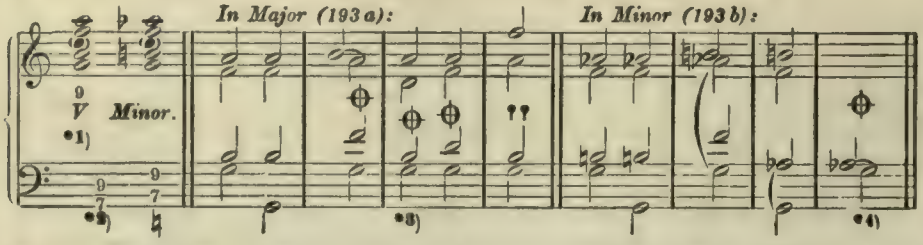
c. the *Fifth* must be omitted in 4-part Harmony; not the Seventh, nor the Third. No Interval can be doubled.

193. This is the first Dominant Chord which differs in Major and Minor. In the former mode it has a *Major* Ninth, in the latter a *Minor* Ninth. Hence, a distinction is made in its treatment in the two modes, as follows:

a. In **Major**, the Ninth should always be placed **in the Soprano.**

b. In **Minor**, on the contrary, the Ninth may lie in *any* of the three upper parts; but, as stated above, *never less than a 9th from the Root*

Ex. 138.



*1) Spoken: "Five-nine". — *2) Always figured $\frac{9}{7}$ on account of 192 b, 2ndly. — *3) 192 a. — *4) 192 b firstly. —

Introduction and Resolution of the $\overset{9}{V}$.

194. a. The Introduction of the Ninth is similar to that of the Seventh, as shown in 173. *i. e.* strict, when entering diatonically from *above*, or when *prepared;* free, when entering from *below*, or with a *skip* (from below). Ex. 139.

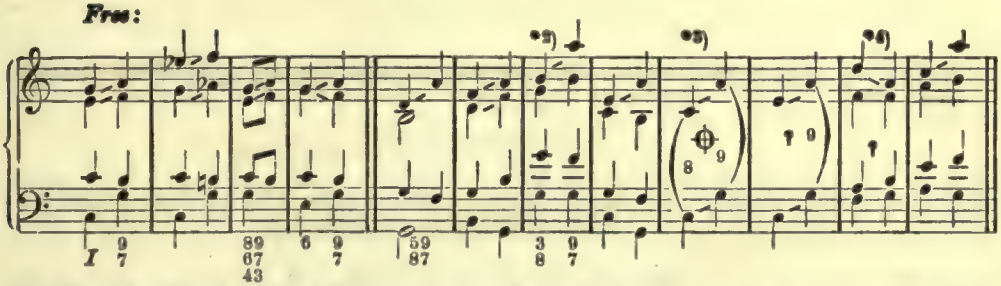
b. The Ninth is resolved *exactly like the Seventh*, diatonically downward; or, if a Passive Resolution, by *remaining*, usually in the same part. The two Dissonances, (Seventh and Ninth) are very commonly introduced and resolved *together*, in the same manner; but *not necessarily*.

c. The Normal Resolution is effected by the I (I_2). The Deceptive Resolution is *not possible*. The Passive Resolution is effected by the IV_1 or IV_2; not by the II. Review 171, 183.

Ex. 139

Introduction. *Strict* (comp. Ex. 126 a, b, c):

Free:



*1) When the 9th is introduced diatonically from above, the Leading-tone moves contrary to its natural tendency. It is Chord-repetition. — *2) A skip of a seventh is hardly possible in any other connection than in Chord-repetition, as here. — 3) Unequal octaves. — *4) Comp. Ex. 126, note *3). —

Ex. 140.

Resolution. *Normal:* *Partial:* *Passive:*

*1) The 9th is resolved alone. —

195. There are a few Licences in the Resolution of the $\overset{9}{V}$ which are to a certain extent peculiar to five-tone Chords, as follows:

a. The ordinary *Deferred Resolution* (see 181 a), and the *Transferred Dissonance* (see 181 b).

b. The *Exchange of Dissonances.*

c. When one Dissonance progresses to another, or, in general, *when any Active tone progresses to another Active tone of similar obligations, it evades its own Resolution, the progression of the last Active tone sufficing for both.* This is another example of *Transferred obligation.* See 180 b.

d. Similarly, an Exchange is sometimes made during the Passive Resolution.

Ex. 141.

*1) The Exchange of the 9th and 7th is only possible in *Minor*, for the reason given in 193 a. See also 181 c. — *2) The 9th (*a*) is merged in the 7th, and the resolution of the latter suffices for both. — *3) The 9th is merged in the *lower* Leading-tone and evades its ordinary resolution. The progression *upward* into the Leading-tone would, however, be very irregular. —

In all of these cases, excepting the Passive Resolution, the Discord is merely *repeated* in another form (179).

Exercise twenty-six.

*1) 193a. — *2) Ex. 103. — *3) These unusual groups of figures indicate, as before, the *course* of the parts. — *4) Ex. 120. — *5) Ex. 140, measure 6. — *6) Rhythm $\frac{3}{4}$ $\frac{3}{8}$ —. *7) Work out this first Bass in *A-Minor* also, with a *different Melody*, according to 193b. —

Fundamental principles.

The Ninth, as Chord-interval, must always be at least 9 tones from the Root. —

The Ninth never appears without its Seventh. —

In *Major*, the Ninth of the $\overset{9}{V}$ must be in *Soprano*. —

The Ninth is introduced and resolved exactly like the Seventh. —

When one Dissonance progresses to another Dissonance, or to another sufficiently Active tone, the resolution of the latter suffices for both. —

The Inversions of the Five-nine.

196. It is obviously impossible to invert the Interval of a 9th, because it *exceeds an octave* (26). But, as the Inversion of a *Chord* merely affects the *Bass part*, and does not necessarily involve an inversion of all the intervals, it follows that complete Inversions of the Chord Five-nine may nevertheless be obtained, in the usual manner. But they are peculiar, and difficult to handle, on account of the inconvenient 9-tone interval, which can neither be *inverted* nor *contracted* (192b). The following Example exhibits the possible forms:

Ex. 142.

*1) The 2nd Inversion can only be employed in five-part harmony, as the 5th (the only omissible Interval) lies in the Bass itself. — *2) The 4th Inversion, involving an inversion of the nine-tone Interval, is an absurdity. — *3) The Resolution of these Chords corresponds to that of the $\overset{9}{V}$ itself. —

D. The Incomplete Chord of the Dominant-ninth,

or, the *Chord of the Seventh* upon the *Leading-tone*

197. It must not be assumed from the above paragraph that the Chord of the Dominant-ninth is only available in its original, fundamental shape. On the contrary, that is the very form in which it is most rarely found or used, because it is too bulky, and subject to too many restrictions. This is the case with every Chord of the Ninth, hence the rule:

a. Five-tone Chords are, as a principle, not to be used in four-part Harmony *in their Complete form*, but must be made *Incomplete* (by omitting the Root. See 186 a, b).

b. The only exception is the $\overset{9}{V}$, which, by virtue of its superiority *as First Class Chord*, *is occasionally used Complete.*

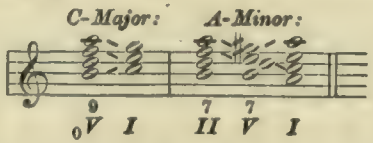
198. The Incomplete $\overset{9}{V}$ is the Chord of the Seventh on the Leading-tone (comp. 187 a) with its Inversions, and differs in Major and Minor, like the $\overset{9}{V}$ itself (193):

*1) Spoken "Five-nine, Incomplete", and figured as usual 7, $\frac{6}{5}$, $\frac{4}{3}$, and 2. See Ex. 134, notes. —

The $_0\overset{9}{V}$ in the Major Mode.

199. The Chord of the Seventh on the Leading-tone is called, in *Major*, the "Ambiguous Seventh", because it is more suggestive of the Relative Minor Key than of its own Major Key, and unless carefully handled, with strict regard to the conditions of its Key, it causes a disagreeable conflict of Scales.

This is owing to the fact that, as the Leading-tone cannot be a Root, the ear naturally assumes the lowest tone of this Chord of the Seventh to be *some other Step*, and consequently in some other Key, namely, the *Second Step* of the *Relative Minor*. Thus



In order to hold this Chord in its Major Key (where it is a Chord of the **Ninth**), and counteract its tendency towards the Relative Minor (in which it is a Chord of the **Seventh**), it must be treated like the original "Ninth", and not like an ordinary "Seventh". The rules are as follows.

200. a. The 7-tone interval from the Leading-tone to the Ninth represents the original 9-tone interval, thus therefore this interval, in Major, should not be in-

verted (as Second; compare 192 b). In other words, the Dom.-Ninth, in **Major**, must never lie below the Leading-tone, thus

b. The most effectual mode of avoiding this error is, *to place the Ninth in the* **Soprano** (193 a).

c. The Major Ninth may, it is true, also lie in a middle part: but only when the Leading-tone is in some *lower* part (according to the above rule), and when the 9th is introduced *strictly*.

d. No Interval can be *omitted* in these Incomplete Chords, and consequently none can be *doubled*.

The following table illustrates the manner in which the $_0{}^9\mathrm{V}$ Incomplete and its Inversions may be erected in Major:

Ex. 143.

*1) These forms are exceptional. See 200 c. — *2) Ex. 142, note *2).

---

201. The Dissonances (7th and 9th) are introduced in the same manner as in the Complete $_0{}^9\mathrm{V}$, but perhaps somewhat more strictly:

Ex. 144.
Major.

*1) When the 9th enters diatonically from *above*, the Leading-tone is generally doubled. This is entirely correct in this connection, as it enables the interval 7 to enter from the interval 8. Comp. Ex. 126, measure 1, 2. — *2) These parallel 5ths are particularly objectionable, and apt to occur. They are best avoided by doubling the Third of the I, as seen in the preceding measure. — *3) 200 c. —

202. The Resolutions, also, coincide with those of the Complete $_0{}^9\mathrm{V}$, *i. e.* **Normal, into the I, I_1; Passive, into the IV (VI); Deferred,** by other forms of Dominant Discords (195).

Ex. 145.
Major.

*1) In the Normal Resolution, these parallel 5ths are of course still more dangerous than in the Introduction, because the former is one of the obligatory progressions. See Ex. 144, note *2). As before, they are generally avoided by doubling the Mediant, as in the next measure. — *2) Comp. Ex. 140, measures 4 and 5. — *3) Comp. 185 a. — *4) Comp. Ex. 136, note *7). —

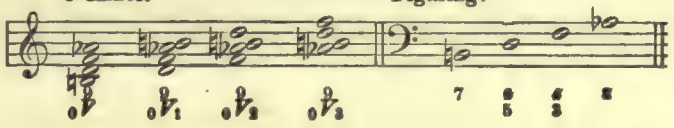
Exercise twenty-seven.

*1) 200 b. — *2) The Positions are reckoned the same as in ordinary Chords of the 7th, without regard to the actual (omitted) Root. See Ex. 134, notes. — *3) Ex. 145, note *1). — *4) This Bass, after being worked out, is to be played at sight, with its Melody, in a number of different Major Keys. — *5) 200 c. — *6) Rhythm ♪♪ —.

The ${}_0^9V$ in the Minor Mode.

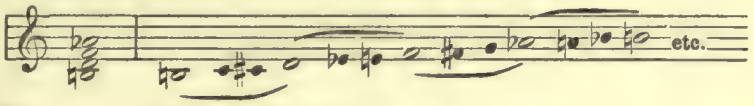
203. a. The Chord of the Seventh upon the Leading-tone **in Minor is called the "*Chord of the* Diminished 7th"**, because it contains that peculiar interval (in *C*-minor, $b\natural - a\flat$).

Ex. 146.



b. One of its most significant features is, that the contiguous intervals are all of the same size (at least, on the Pianoforte), namely, *three half-steps*, as shown in the following Example:

Ex. 147.



c. Consequently:

All the forms (Inversions) of the Chord of the Dim. 7th *must sound exactly alike*, as they constitute each time a group of "three times three half-steps". This can best be tested at the Piano;

It is impossible to distinguish the separate Chord-Intervals from each other, and therefore the restriction in regard to the location of the Ninth in *Major* (200 a, b) is unnecessary,

These Chords are the most flexible in the whole Harmonic System, and accommodate themselves with unusual ease and readiness to other Chords. Hence they are very important and useful Harmonic bodies.

d. The difference in the denomination or *actual* size of the intervals (according to the *letters*) is necessary for the identification of the Chord and Key. In the above Example all the adjacent tones constitute minor 3^{rds} excepting $a\flat - b\natural$, which is an augmented 2nd, and represents the figures 8 and 7 as shown in Ex. 127, note *2), which see.

204. The rules are, then, as follows:

a. The disposition of the Intervals in the four parts is entirely optional The ninth may lie *in any part*, even in Bass. Otherwise the treatment is nearly the same as in Major.

b. As in Major, no interval is to be *omitted*, and none *doubled*.

c. The Introduction of the *Ninth diatonically from above* is impracticable, on account of the false progression. See Ex. 71.

d. In the Normal Resolution, the parallel 5^{ths} are not as bad as in Major (Ex. 145, note *1), because one of the 5^{ths} is diminished. Still, it is advisable to avoid them, as in Major, by doubling the Third of the resolving-chord (I).

Ex. 148.
Minor.

*1) These skips to the Leading-tone are good. See 174. —

Ex. 149.
Minor.

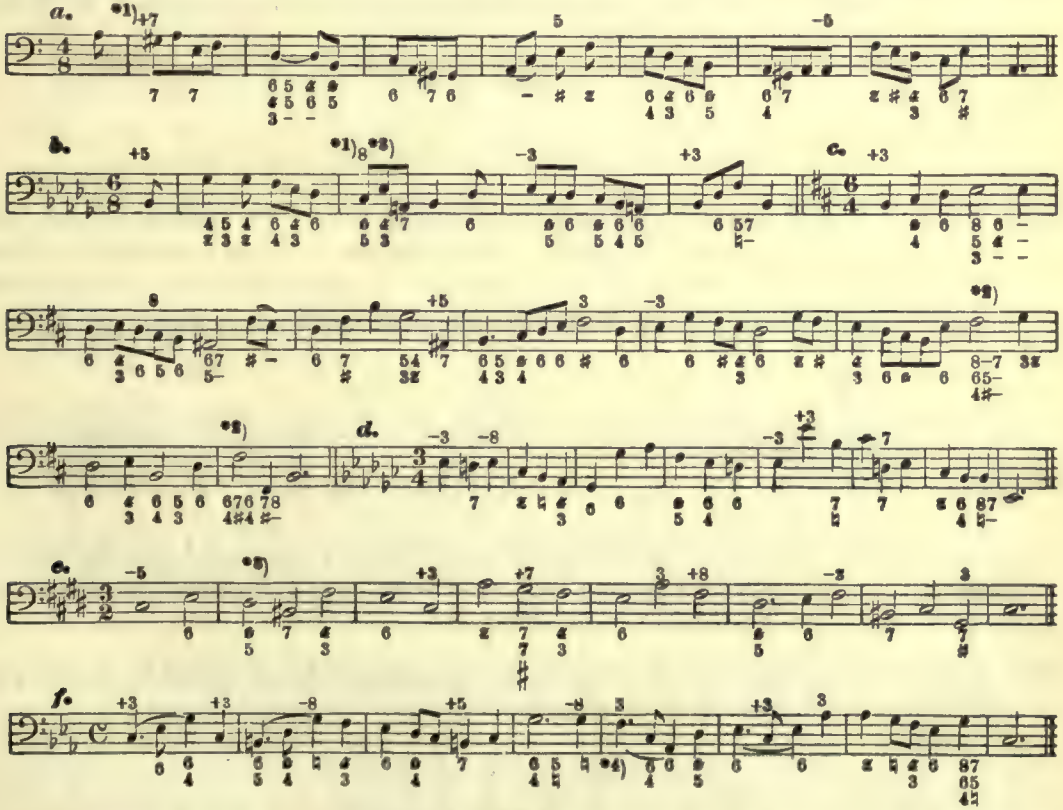
*1) 204 d. — *2) These skips from the Dissonances, in Bass, may be justified on the grounds of 203 c. See also Ex. 136, note *7). — *3) The 3rd Inversion of the Dim. Seventh is somewhat weaker than the others, on account of the 9th in Bass, which, though admissible, is unfavorable. Especially the Normal Resolution (into another weak Chord, the I_2) is objectionable. Therefore the following measures are preferable. — *4) Passive Resolution. — *5) The irregular progression in Soprano (contrary to Ex. 71) is correct, because it is merely *Chord-repetition!*

---

205 It may be mentioned, in passing, that these Chords of the Dim. 7th (the ${}_0\overset{9}{V}$ of *Minor*) are very frequently used *in the same form in the* **Major Mode** *also* (*i. e.* with *minor* Ninth), not only because they are so much easier to handle than the Ambiguous 7th, but also because they are much more striking and attractive than the latter.

Exercise twenty-eight.

These Minor Basses are all to be worked out in a number of different ways (*i. e.* with *different Sopranos*, according to 204 a). The given Positions may be used for the first solution, and then must be ignored altogether. —



*1) Exercise 27, note *2). — *2) Rhythm ♩ ♫. — *3) Comp. Ex. 149, meas. 4. — *4) Comp. Ex. 88, note *2). —

Fundamental principles.

Five-tone Chords, with the single exception of the Dominant-Ninth, are not used Complete in 4-part Harmony, but Incomplete (without the Root). —

The Incomplete $\overset{9}{V}$ is the Ch. of the 7th on the Leading-tone. —

The Incomplete $\overset{9}{V}$ in *Major* suggests the Relative Minor Key, and is only possible when the Ninth lies *above* the Leading-tone. —

The Major Dominant-9th is best in Soprano. —

The Incomplete $\overset{9}{V}$ in *Minor* is the Chord of the Dim. 7th, consisting of equidistant intervals, and is very useful, attractive and easy to connect. —

The Chord of the Dim. 7th and its Inversions all sound exactly alike. —

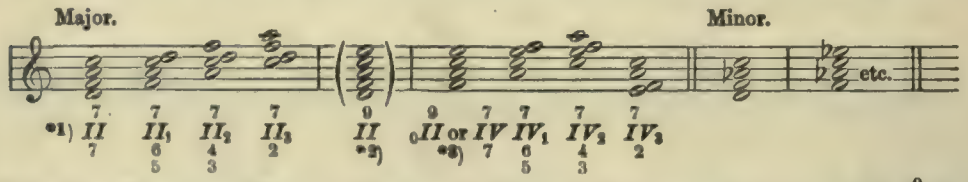
The Ninth in Bass is unfavorable. —

The First Chord-Class, or Dominant Element, embraces the Discords $\overset{7}{V}$, $\overset{9}{V}$, ${}_0\overset{7}{V}$ and ${}_0\overset{9}{V}$, and the Concords V and III (92).

Section 2nd. The Discords of the Second Class.

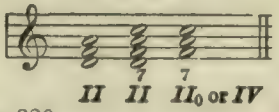
206. The fundamental tone of this Class is the second perfect 5th above the Tonic, or, the Second step of the Scale. Review 165. Therefore the 2nd Class embraces the Chord of the 7th on the second step, the Chord of the 9th on the second step, and the Chord of the 7th on the fourth step, as Incomplete Chord of the 9th, — in Major and Minor.

Ex. 150.



*1) Spoken: "Two-seven"; "Two-seven-one" etc., and figured as usual, 7, $\frac{6}{5}$, $\frac{4}{3}$, 2. — *2) The $\overset{9}{II}$ is only available in 4-part Harmony without its Root, as $\overset{7}{IV}$ (See 197 a); — *3) Called "Four-seven" instead of "Two-nine, incomplete", on account of its relation to the *Triad* IV. —

207. To this Class belong also, as Concords, the fundamental 3-tone Chord II, and its Parallel the IV, *which is actually an Incomplete Two-seven!*



Compare 92, 93, 94 a; and see 220.

A. The $\overset{7}{II}$ and its Inversions.

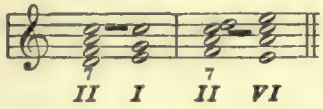
208. a. These Chords are not quite as common as those of the First class, but they are barely less important, especially in modern Harmony. They are treated, ***relatively speaking***, almost exactly like the Dominant Chords, only a little more strictly. The principal external distinction is, that the $\overset{7}{II}$ has a **minor Third**, while that of the $\overset{7}{V}$ is *major*. Moreover, the 2nd-Class Chords do not contain the Leading-tone (like the First Class), but the 4th and 6th Steps of the Scale (see 96 and 70). —

b. The Seventh (Dissonance) is resolved *diatonically downward*, or *remains stationary* (Passive Res.), and is not doubled. In the $\overset{7}{II}$ itself, as *fundamental* Chord, the Fifth may be left out; but in the Inversions, no omissions are possible.

c. The Normal Resolution is effected, as usual, by the Chords which lie a perfect 5th below, namely, those of the First Class (Dominant).

This fundamental rule must be accepted in its most comprehensive sense. Every 2nd-Class Chord is normally resolved into any and every 1st-Class Chord, Concord or Discord. The same is true of all the Discord Classes, each of which obtains its Normal Res. by progressing into the *preceding* Class: the 2nd into the 1st, the 3rd into the 2nd, and the 4th into the 3rd.

d. The Passive Resolution, for which this Discord-Class evinces a decided preference, is effected by the Tonic Chords (I or VI), which contain its Dissonance as consonant Interval:



(Comp. 183).

e. The Seventh should be introduced strictly, as a rule (173 a, b); rarely with a skip, never diatonically from below.

Ex. 151.

*1) Major and Minor. Separate measures, as usual. — *2) Normal Res. — *3) This is the first case of different *Discords in succession*. The Resolution into the Dominant 7th or 9th is more favorable for the Key, than into the *Triad*. — *4) Passive Res. — *5) After the Pass. Res. it is best to return to the same Chord-Class, as here. Compare 184 a. — *6) Ex. 128, note *1). — *7) In the Pass. Res. no other part should run into the Seventh. Here the Soprano is wrong; the preceding measure is right. Comp. Ex. 132, note *4). — *8) The 2nd Inversion is the weakest form, naturally; it is better (stronger) in Minor. — *9) When the Bass progresses upward into the Leading-tone, the Seventh may skip downward to the Dominant, or move parallel with the Bass in 3rds, as in the next measure. (See 185 a). — *10) The Pass. Res. of the Seventh in *Bass* is very doubtful. — *11) The last two measures are exceptional. — *12) In the $\overset{7}{II}$ *itself* the Fifth may be omitted.

B. The $\overset{7}{IV}$ and its Inversions.

209. **a.** The assignment of this Chord to the Second Discord-Class, instead of assuming that it is an independent (say 3rd) Class, on account of the Principal tone upon which it stands (the Subdominant), is justified by all of its harmonic movements, by its sound, and by the analogy with the development and arrangement of the First Discord-Class (Compare 188, 197 a).

b. The Dissonances (7th and 9th) are treated like those of the Dominant. The introduction is *perfectly strict*.

c. No Interval can be omitted, and none doubled (200 d).

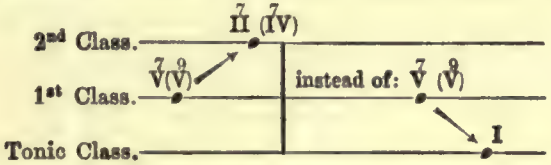
d. The Chord is the same in character in Major and Minor. The Ninth may lie in *any* part.

Ex. 152.

*1) These parallel 5ths are even more likely to occur than in the analogous Resolution of the $_0\overset{9}{V}$ (Ex. 145, note *1)); they are best avoided by progressing into the *Discords* $\overset{7}{V}$ or $_0\overset{9}{V}$. — *2) Passive Res. — *3) Ex. 144, note *1). — *4) Partial Res. See Ex. 140, meas. 4, 5. — *5) The treatment of a 7th is less strict, when accompanied by the Ninth. Comp. Ex. 145, meas. 13. — *6) The 2nd and 3rd Inversions (Seventh and Ninth in Bass) have no Passive Resolution. Comp. Ex. 151, note *10). —

The Digression into the next higher Class.

210. The **Digression** or Passive Resolution of the First-Class Discords (explained in 182, 183 a, which review) may also be made into the *Discords* $\overset{7}{II}$ and $\overset{7}{IV}$, as well as into the *Concords* II and IV. In this case the progression again represents the ***reverse of the Normal Resolution*** (see 183 b), being the ***upward*** instead of the ***downward*** direction: in the most literal sense, a "Digression" from the natural order of harmonic succession. Thus:



211. When First-Class Chords ascend in this manner into 2nd-Class Discords, the rules of the Passive Resolution must be strictly respected, namely.

a. The first Dissonance (Dom.-7th or 9th) *remains* in the same part. Furthermore;

b. The progressions of the parts must be smooth; and

c. After the Digression, *the first Chord must return*, in the same or in a different form. See 184 a; 184 b is not possible in this case.

Ex. 153.

*1) Major and Minor. — *2) The second Dissonance, in this connection, usually enters from *below*, contrary to 208 e. — 3) See 211 c. Two Pass. Resolutions in succession are not possible. — In general, comply with Rule III (46). —

Further illustrations of 2nd-Class Chords:

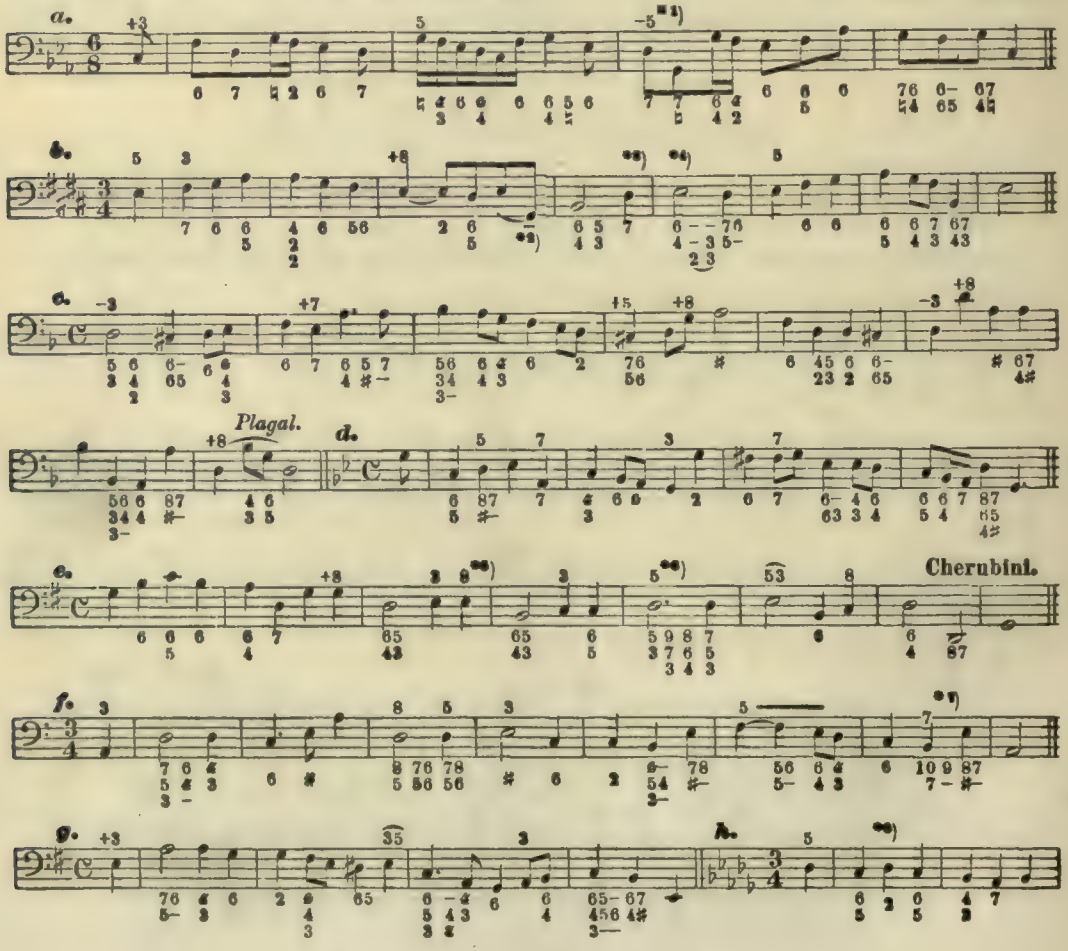
Ex. 154.

Ex. 155. Mendelssohn.

Exercise twenty-nine.

A. Basses.

(To be analyzed as usual, after being worked out, with special reference to the Resolutions. The given Positions (upper figures) may be ignored, if desirable.)



*1) 87 a. — *2) Ex. 107, note *1). — *3) 200 b. — *4) Rhythm ♩ ♫ ___. — *5) Compare 100 b. Here it is Chord-repetition. — *6) 193 a. — *7) An exceptional Complete $\overset{9}{\text{II}}$. As to the figuring, see Ex. 139, meas. 2. — *8) 211. —

B. Play the following Chord progressions at the Piano, in different Major and Minor Keys. At first with the right hand alone, and afterwards with both hands. (Exercise 24 B.)

$$\text{I}_1\text{—}\overset{7}{\text{II}}\text{—}\overset{7}{\text{V}}_2\text{—}\overset{\frown}{\text{I}} \parallel \text{VI—}\overset{7}{\text{II}}_1\text{—V—}\overset{\frown}{\text{I}} \parallel \text{IV}_1\text{—}\overset{7}{\text{II}}_1\text{—}\overset{7}{\text{V}}_3\text{—}\overset{\frown}{\text{I}}_1 \parallel \text{I—}\overset{7}{\text{II}}_3\text{—}\overset{7}{\text{V}}_1\text{—}\overset{\frown}{\text{I}} \parallel \text{I—}\overset{7}{\text{II}}_3\text{—}{}_0\overset{9}{\text{V}}\text{—}\overset{\frown}{\text{I}} \parallel$$

$$\overset{7}{\text{II}}\text{—}\text{I}_1\text{—}\overset{7}{\text{II}}_1\text{—}\text{I}_2\text{—}\overset{7}{\text{V}}\text{—}\overset{\frown}{\text{VI}} \parallel \text{I}_2\text{—}\overset{7}{\text{IV}}\text{—}{}_0\overset{7}{\text{V}}_2\text{—}\overset{\frown}{\text{I}}_1 \parallel \text{I}_2\text{—}\overset{7}{\text{IV}}_1\text{—}{}_0\overset{7}{\text{V}}\text{—}\overset{\frown}{\text{I}} \parallel \text{IV—}\overset{7}{\text{IV}}_3\text{—}\overset{7}{\text{V}}_2\text{—}\overset{\frown}{\text{I}} \parallel$$

$$\text{VI—}\overset{7}{\text{IV}}\text{—}\text{I}_2\text{—V—}\overset{\frown}{\text{I}} \parallel \overset{7}{\text{V}}_1\text{—}\overset{7}{\text{II}}_3\text{—}\overset{7}{\text{V}}_1\text{—}\overset{\frown}{\overset{3}{\text{VI}}} \parallel {}_0\overset{9}{\text{V}}\text{—}\overset{7}{\text{IV}}_2\text{—}\overset{7}{\text{V}}_1\text{—}\overset{\frown}{\text{I}} \parallel$$

Fundamental principles.

The 2nd Chord-Class or Subdominant Element embraces the Discords $\overset{7}{\text{II}}$, $\overset{9}{(\text{II})}$, $\overset{7}{\text{IV}}$, and the Concords II and IV. —

The Normal Resolution of each Discord Class is effected by the preceding Class (a perfect 5th below). —

The "Digression" or Passive Resolution is effected by the following Class (a perfect 5th above). —

After the "Digression" the first Discord reappears. —

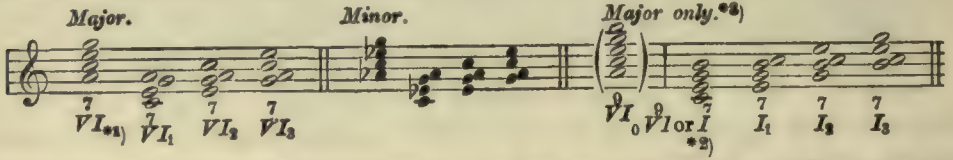
Section 3rd. The 3rd and 4th Discord-Classes.

312. The Discords of the 3rd and 4th Classes are very rare. (See 165 e). They are hardly ever used as *essential* members of the fundamental Chord-succession, but as Embellishing or Passing Chords, usually upon *fractions* of beats, or on short beats, between essential and more independent Chords. Nevertheless, their actual existence as genuine Harmonic bodies, their origin, and their comparative signification in their Key are unmistakably apparent in Ex. 123, and therefore they claim a certain degree of consideration.

A. The Discords of the Third Class.

213. a. The 3rd Discord-Class embraces the Chord of the 7th on the **Sixth Step** (the 3rd perfect 5th above the Tonic) in Major and Minor, the Chord of the 9th on the Sixth Step, and the Chord of the 7th upon the **First Step** (as Incomplete Ninth) *in Major only*.

Ex. 155.



*1) Spoken: "Six-seven", and figured as usual. — *2) Spoken: "One-seven". — *3) These Chords cannot appear in Minor, because the Ninth (*b*) could not be resolved diatonically downward (Ex. 71).

b. This Chord-Class (as stated in 165 e) unlike the First and Second Classes, consists exclusively of *Discords*. The Concords VI and I, which occupy the same Scale-steps as the 3rd Class, are the representatives of the **Tonic Class** (92).

The most important and essential quality of the Tonic Element is its Inactivity, as Basis or "Centre" of its Key, and when this quality is nullified by the addition of a dissonant Interval, *it ceases to be a "Tonic" Harmony* in the correct sense of the term, and assumes a place among the Discords. Review 165 c.

Hence the **Triads** I and VI are Tonic Chords because they are consonant; but as **Chords of the Seventh** (^{7}VI and ^{7}I) they become Third-Class Harmonies.

214. The rules for the treatment of these Chords are as follows:

a. Seventh and Ninth are resolved as usual, diatonically *downward*, and are introduced *strictly*.

b. The Normal Res. is effected by the preceding Class (the 2nd), *i. e.* by the II, IV, ^{7}II (^{7}IV). Compare 208 c. —

Ex. 156. *1)

*1) Major and Minor. — *2) The Fifth of the ^{7}VI *itself* may be omitted, and the Third doubled. Comp. Ex. 151, meas. 2 (note *12). — *3) The 3rd Inversion (Chord of the Second) is one of the most useful forms, here as elsewhere.

Ex. 157. *1)

*1) Only in Major. — *2) When the Leading-tone becomes a Seventh it must obey the law of the latter, and progress *downwards*. — *3) This measure is not strictly harmonic, because the $\overset{7}{I}$ does not obtain a genuine "Resolution" by progressing into the VI. The *b* in Bass is a simple "Passing-note" and does not affect the fundamental Chord-progression, I—VI, in the least. (See Ex. 286, note *1)). —

Irregular Passive Resolution.

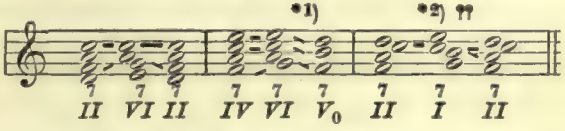
215. These Chords may also progress into ***Dominant Discords***, in which case the progression corresponds to the Passive Resolution, because, as in former cases ($\overset{7}{V}$—IV; $\overset{7}{II}$—I), the Dissonance of the first Chord becomes, by remaining, a consonant Interval of the following Chord. But in this case it is made irregularly: the Dissonances of the 3rd Class are too weak to be held, and therefore ***resolve immediately, diatonically downward, into the Dissonances of the Dominant Chords!*** This is a very effective and important progression, and almost preferable to the regular Normal Resolution. (Comp. 208 d). —

Ex. 158.

*1) Compare Rule III (46). — *2) With the exception of this measure, the whole Example is only possible in Major, because the 6th Step usually ascends (Ex. 71). — *3) Comp. Ex. 152, note *5). —

216. The "Digression" from the 2nd Class into the 3rd (Comp. 210) is made as follows:

Ex. 159.



*1) The progression of the $\overset{7}{VI}$ into the $\overset{7}{V_0}$ after the Digression, although contrary to 211 c, is allowed, because the Seventh *g* is *actually resolved* into *f*. — *2) Weak. —

Exercise thirty.

To be worked out and analyzed as before. — The Positions may be ignored.

*1) Omit the Fifth. — *2) Rhythm ♩ ♪ —. *3) Exercise 18, note *4). — *4) Ex. 157, note *2). —

Fundamental principles.

The Tonic Chords, when impaired by a Dissonance, cease to be the Harmonic basis of their Key. —

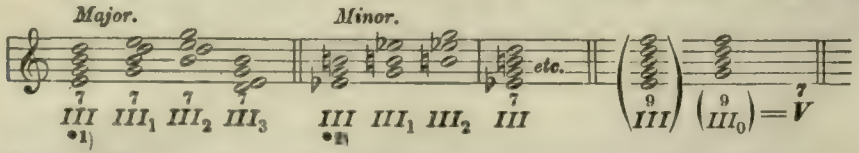
The Dissonances of the 3rd-Class Chords cannot remain stationary. —

B. The Discords of the 4th Class.

217. This exceedingly unimportant and rare Class of Discords consists of the Chords of the 7th and 9th upon the **Third Step** in Major and Minor, and the Triad III in Minor.

The Chord of the Ninth is, as usual, almost entirely useless in 4-part Harmony, and, when its Root is removed, the original V re-appears. This proves that the circle of Chords which constitute a Key is herewith completed, and that, as stated in 92, 93, the Mediant Chords are remotely related to those of the *Dominant*.

Ex. 160.



*1) Spoken: "Three-seven". — *2) The III in Minor is an Augmented Triad (34, 110). It is even more strange in sound than the Diminished Triads, but very effective when properly used. —

The $\overset{7}{III}$ in Major.

218. The $\overset{7}{III}$ in Major is resolved Normally into 3rd-Class Chords (208 c), VI and $\overset{7}{VI}$; not into the $\overset{7}{I}$ or I. But, similar to the 2nd and 3rd Classes, it prefers an Irregular Res., into the IV and $\overset{7}{IV}$, corresponding in a sense to the Irreg. Pass. Res. of the $\overset{7}{VI}$ (215). See 107 b. — The Dissonance is treated like other Sevenths.

Ex. 161.

*1) When followed by the I, the $\overset{7}{III}$ is not an *actual Chord*, but only a combination of Grace-notes *resembling* a Chord. Comp. Ex. 157, note *3). — *2) The "Digression" from 3rd-Class into 4th-Class Chords is possible in Major, but very inferior, and rare.

The III, $\overset{7}{III}$ and $\overset{9}{III}$ in Minor.

219. a. The III in **Minor** sounds, and is treated, very differently from the Major III. Its Dissonance (the Augm. Fifth), being the Leading-tone of the *Minor* scale, **must ascend** to the Tonic. (See also 168). The best Resolution is the Normal, into the VI (or $\overset{7}{VI}$). The Irregular Resolution is dangerous, on account of the upward progression of the Leading-tone; only the IV_4 is possible. The Dissonance may lie in any part, and is introduced ***strictly***.

Ex. 162.

*1) The line through the figure 5 signifies, as before (Exercise 18, note *5), that the corresponding note is *raised*. — *2) When an Accidental stands alone, in the Bass figuring, it refers to the figure 3; see Remark before Exercise 9. — *3) The progression of the III or III_1 into the I or V is not "harmonic" (Ex. 161, note *1)). —

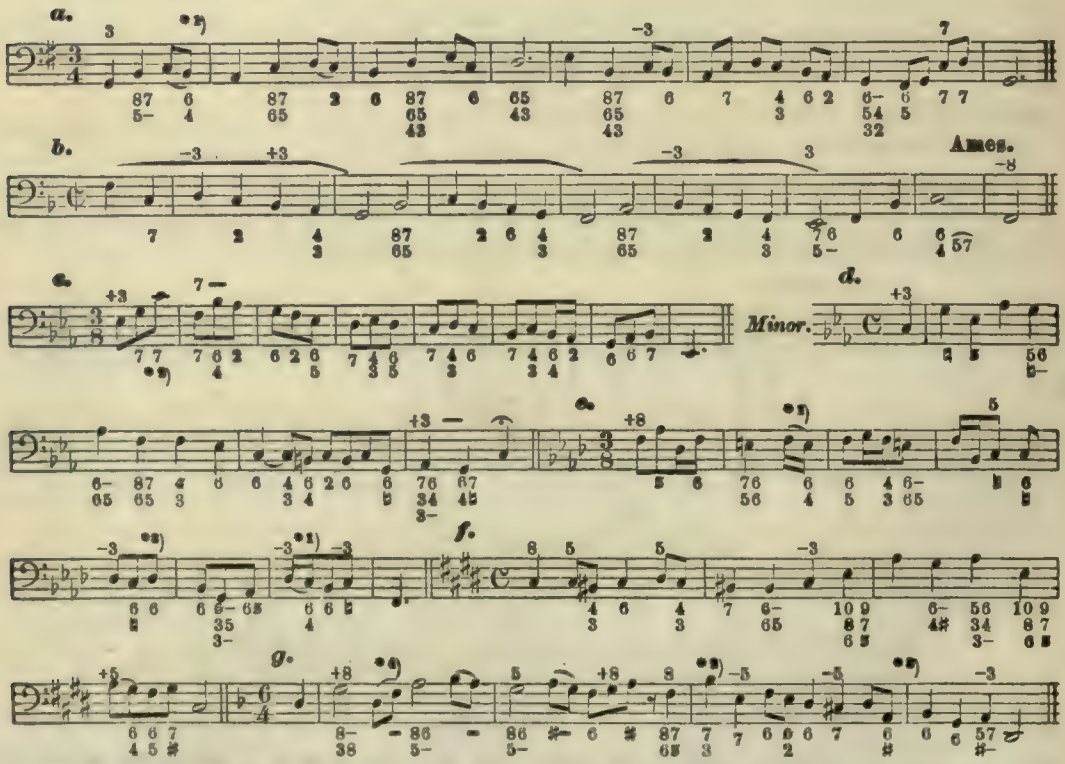
b. The Chord of the $\overset{7}{\text{III}}$ in Minor is of but little consequence. —

c. The $\overset{9}{\text{III}}$ is not absolutely useless, — probably on account of its resemblance to the $\overset{7}{\text{V}}$. — It is treated like the III itself; the Seventh and Ninth resolve *downward*.

Ex. 163.

Exercise thirty-one.

The Positions may be ignored. —



*1) Ex. 120. — *2) Omit the Fifth. — *3) 132 a. — *4) Ex. 107. note *1). — Analyze these Basses, as before. —

Table of the Harmonic System of a Key.

220. The following table illustrates the arrangement and relations of the Chords within each Key: (Compare 51, Ex. 72, and 165 a to f)

	Tonic Class:	Dominant or First Class:	Subdominant or Second Class:	3rd Class.	4th Class.
Concords	I VI and Inversions.	V (III) and Inversions.	IV II and Inversions.		
Discords		$\overset{7}{V}$ $\overset{7}{V_0}$ $\overset{9}{V}$ $\overset{9}{V_0}$ and Inversions.	$\overset{7}{II}$ $\overset{9}{(II)}$ $\overset{7}{IV}$ and Inversions.	$\overset{7}{VI}$ $\overset{9}{(VI)}$ $\overset{7}{I}$	$\overset{7}{III}$ $\overset{9}{(III)}$ III in Minor.

a. The Chords in parenthesis are *very rare*.

b. The Classes are a *perfect fifth* apart: 165 a.

c. The Tonic Class is Inactive, the others are all Active: see also 52.

d. The Normal (Regular) Progressions or Resolutions are made by each Class *one Grade from right to left* (*towards* the Tonic): 61 b; 81 b; 208 c.

e. The reversed progression (*away* from the Tonic) is the "Digression": 210. This, and the progression of *two* Grades (215; 218) are both Irregular.

f. Every *Regular* progression is complete in itself, and entirely cancels the obligations of the Class. Every *Irregular* progression, on the contrary, is only a Partial Resolution, or none at all, and demands justification by *subsequent* Resolution. The best and commonest mode is, after every Irreg. prog., to *return* immediately to the former Class: Ex. 68, measures 4, 5; 184 a; 211 c.

g. The movements of the Triad III are eccentric.

Synopsis of the fundamental principles of Rhythm, Melody and Harmony.

221. These are general fundamental principles, not absolute rules. Many exceptions are possible, (chiefly in favor of smooth voice-progression) which have already been explained in the respective lessons. The most striking ones are repeated here, in connection with the rule. The pupil is recommended to memorize these paragraphs, as they embrace all the important rules: especially Nos. 2, 6, 9, 10, 11, 12, 18, 19 and 27.

Rhythm.

1. **A long note, or a long (repeated) Chord can only stand (*i. e. commence*) upon an accented beat.**
2. ***Consequently each new measure or half-measure (wherever there is an accent) should commence with a new Chord and new Bass tone.*** — **The two exceptions are given in 178 b. (Another not uncommon exception is explained in 340 and 351).**
3. **Strong (accented) beats cannot be subdivided (say into $\frac{8}{}$ or $\frac{16}{}$ notes) unless the following (weaker) beat or beats are also similarly subdivided.**
4. **The Rhythm of the several parts should be as different as is consistent with the uniformity and regularity of the whole.**

Melody (Soprano part).

5. **After a wide skip the melody should *turn*: excepting when the Chord is simply repeated.**
6. **The Active Tones must progress according to their natural tendencies: the 7th step *upward*, the 6th and 4th steps *downward*. Excepting when approached smoothly from the opposite direction, in which case they may move *diatonically contrary* to their tendency.**
7. **Triads usually take their Third in Soprano. Chords of the 6th take the Position of the Octave. In *Dominant* chords the Positions are optional, excepting in the Major $\overset{9}{V}$, which demands the *Ninth* in Soprano. The Triad VI never takes the 8^{ve} Position. The Triad II seldom takes the Position of the 5th.**
8. **It is dangerous to skip beyond a 3rd to sensitive tones — such as the Fifth of the Chord. The Leading-tones, and the Dissonances, may be skipped to from the direction opposite to that of their tendencies: (to the 7th step, from *above*; to the 6th step, and to Sevenths and Ninths, from *below*).**

Harmony.

9. **The whole System of Chords within one Key is divided into three Primary Elements or Classes, viz:**

   The *Tonic* Class, exclusively consonant, consisting of the I, the VI, and their Inversions;

   The *Dominant* or *First* Class, consonant and dissonant, consisting of the V, $\overset{7}{V}$, $\overset{7}{V_0}$, $\overset{9}{V}$ and $\overset{9}{V_0}$, and indirectly, the III;

   The *Subdominant* or *Second* Class, consonant and dissonant, embracing the II, IV, $\overset{7}{II}$ and $\overset{7}{IV}$. — The extraneous 3rd and 4th Classes are very rare.
10. ***The Voice-Progressions must be as smooth as possible. The choice of a Chord or an Inversion often depends solely upon its proximity, and the facility with which it can be reached,* not only in Bass, but in all the parts.**
11. **Successive *perfect* 5^{ths} and Octaves must be avoided.**
12. **The parts should be led as much as possible *in parallel 3^{rds} and 6^{ths}*.**
13. **The Root of any fundamental Chord may be doubled. In Chords of the 6th, double whichever tone will give the smoothest voice-progression; *excepting the Leading-tone, which can but very rarely be doubled.* In $\frac{6}{4}$ Chords the *Bass tone* is doubled.**

14. The Fifth may be omitted in the I, IV, V, $\overset{7}{V}$, $\overset{9}{V}$, $\overset{7}{II}$, $\overset{7}{VI}$. In *no other Chords* are omissions allowed, in 4-part Harmony.

15. Sevenths and Ninths are resolved *diatonically downwards.*

16. Inversions are more flexible than fundamental Chords, but weaker; hence, they require smooth progression in the Bass part. Inverting a Chord facilitates the Chord-progressions, and simplifies the treatment of the *Fifth and 8ve, in Soprano.*

17. All the Triads may be freely used, excepting the III. — All the Chords of the 6th may be freely used, excepting the III_1 and VI_1. — The $\frac{6}{4}$ Chords must be used sparingly; the best are the I_2 and IV_2. The I_2 is very important at the Semicadence and Perfect Cadence. — Every form of the $\overset{7}{V}$ is good. The $\overset{7}{V}$ Incomplete and other Dim. Triads should be used principally as Chord of the 6th. The $\overset{9}{V}$ seldom appears Complete; other Ninths never. The $\overset{9}{V}$ Incomplete is not good in Major, but *excellent in Minor*, where every possible form can be utilized. The $\overset{7}{II}$ and Inversions may be freely used. The $\overset{7}{IV}$, and all 3rd and 4th-Class Chords, should be avoided.

Movements of Chords (within same key).

18. *All Dominant Chords must be followed sooner or later by a Tonic Chord (I or VI). They may be prolonged by Repetition in different forms, and it is even possible to interpose a Second-Class Chord* (II, IV, $\overset{7}{II}$) *between the different forms, but the Tonic Element will eventually follow.* Peculiar exceptions to this canon of Harmony are explained in 297b, and 314—3.

19. The Tonic Chords may progress with the utmost freedom into any other Chord.

20. Subdominant *Concords* prefer to progress into Dominant Chords, but may go directly into the Tonic Class. Second-Class *Discords* prefer the Passive Resolution into Tonic Chords.

21. In general, the best progression is the *Normal*, downward one Harmonic Degree.

22. A Subordinate Triad cannot progress into its *own* Principal Triad.

23. Chords of the 6th prefer to move smoothly, and connect very readily with each other. Irregular *Concord-progressions* are often rectified by making the second Chord an Inversion.

24. Chords of the $\frac{6}{4}$ can be connected with Chords of the same Bass tone, same Root, and neighboring Bass tone. Unaccented $\frac{6}{4}$ Chords generally progress diatonically. The Tonic $\frac{6}{4}$ Chord, when *accented*, must ultimately reach the V.

25. The *Inversions* of the $\overset{7}{V}$ progress into the I, not into the VI.

26. All Chord-progressions may be classified as *Regular* or *Irregular*. In the latter case justification, and subsequent Resolution, are necessary.

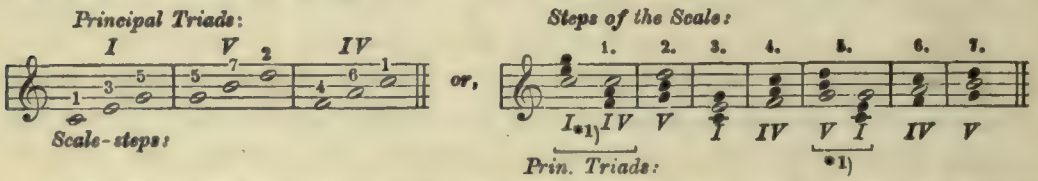
27. All rules are nullified when a Chord is simply repeated.

Division C. The Harmonizing of Melodies.

222. In Harmonizing a Melody, *i. e.* assigning to each separate Melody-tone its appropriate Chord and Bass tone, it is only necessary at first to decide which of the three primary Elements or Chord-Classes the tones represent (51), for the whole body of Chords is embraced in these, as has been seen. The three Elements are represented most directly by the three **Principal Triads I, V, IV,** (see 220), in which all the steps of the scale are contained.

223. The following table, in which the primary harmonic basis of **each Scale-step is defined, must be thoroughly memorized in the Key of C, and then applied to all the other Keys, by transposition:**

Ex. 164. *C*-Major.

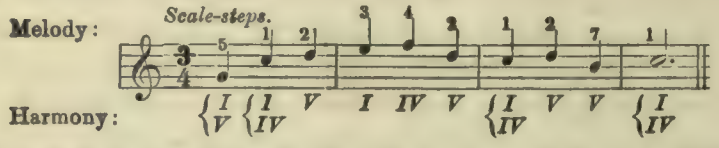


*1) The *Tonic* note (in the Melody) occurs in *two* primary Chords, the I and IV; and the *Dominant* note occurs both in the V and the I. At these places, of course, choice must be made between the two Elements; but all the other steps of the scale represent, originally, but one primary Chord.

The pupil should learn thus to *associate each Scale-step* (not by *Letter* but by *Number*) *with the Principal Triad in which it occurs, and with which (or with one of its Derivatives) it must be harmonized.* For example, the 6^{th} *step* (in *C* the tone *a*, in *G* the tone *e*, in *F* the tone *d*, in *A*-minor the tone *f*, etc.) must be accompanied by a *Subdominant* Chord of the Key in question. And so forth.

224. The application of this table to any given Melody defines the Harmonic Basis, from which the *Bass part* is deduced, similar to the manner in which, in the foregoing Exercises, the *Soprano part* was deduced from the Harmonic Basis indicated by the figured Bass. For example:

Ex. 165.



225. When choice must be made between two Elements, as at the Tonic and Dominant notes (*c* and *g* in this Example), and, in general, *wherever a choice is necessary between all the possible Chords of the same (or perhaps of another) Element*, the following former Rules will serve as a guide:

a. The *very first* Chord must be the I, the *last two* Chords the V and I (63 c) **in Triad-form.**

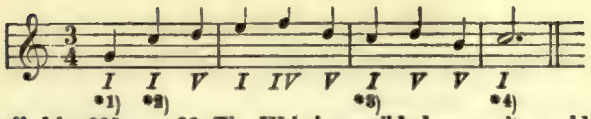
b. The rules of Chord-progression as stated in 221, Nos. 18 (19, 20), must be respected.

c. The rule of *Rhythm* as stated in 221, No. 2 must be respected; *i. e.*, accented beats must be *new* Chords.

d. The Chords must not be so chosen that any two successive Melody-notes would be the *Fifths* of the Chords (59 b). Successive Octave-Positions are less dangerous, because they can easily be rendered harmless by Inversion.

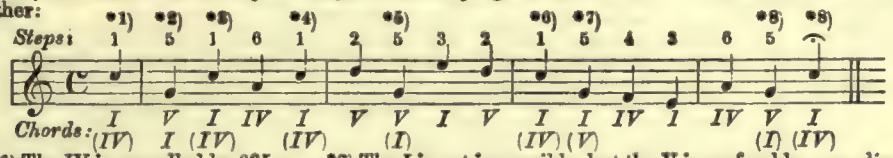
It is generally unwise to make a note which enters or progresses with a ***wide skip***, the ***Fifth*** of a Chord (75 b). Applying these rules to the above Melody, the result is as follows:

Ex. 166



*1) The V is cancelled by 225 a. — *2) The IV is impossible because it would make successive Positions of the Fifth not only with the preceding Chord, but with the following, also (225 d). — *3) The IV is cancelled by 225 b: the V, on the preceding beat, must progress into *the I.* — *4) The IV is cancelled by 225 a. — Further:

Ex. 167.



*1) The IV is cancelled by 225 a. — *2) The I is not impossible, but the V is preferable, according to 225 c. — *3) The IV cannot follow the V; nor can it be repeated at the following (accented) beat. — *4) The IV is cancelled by 225 d, as it makes 5^{ths} with the succeeding Chord. — *5) The I is cancelled by 225 c, in view of the following beat. — *6) The IV cannot follow the V. — *7) The V cannot progress into the IV. — *8) The I and IV are cancelled by 225 a. —

226. When the *Harmonic Basis* has been found in this manner, it is next necessary to define the *Bass part*. This, which is simply a choice of *Inversion*, is regulated by the following *former* Rules

a. When the Soprano has the Third of the chosen Chord, the Bass generally takes the *Root* (221—7). And when the Soprano has the Root, the Bass takes the *Third* (221—7); except at the very beginning, and at the two Cadence Chords, where the *Root in Bass* is obligatory (225 a).

b. But the rule of smooth voice-progression is an important criterion for the Bass part, as well as for the Soprano. See 221, No. 10. That is to say, the Bass should take that Interval of the chosen Chord which lies most convenient, as a rule.

c. The use of the Fifth in Bass (2nd Inversion) is to be deprecated. See 221, Nos. 24 (and 17).

d. Each accented beat should take a new Bass tone (221, No. 2).

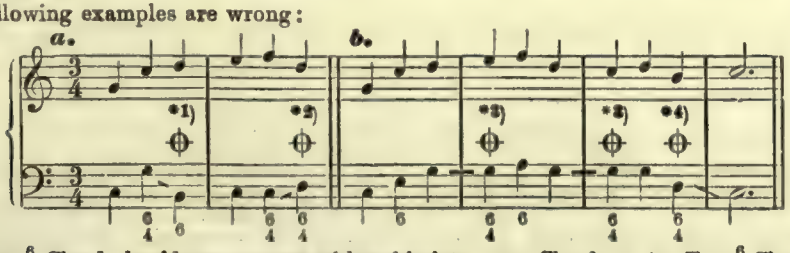
Applying these rules to Ex. 166, the result is:

Ex. 168.

*1) 226 a. Root in Soprano, Third in Bass; and *vice versâ*. — *2) Here the $\frac{6}{4}$ Chord is very appropriate and convenient, on account of the adjacent Bass notes. See Ex. 118. — *3) It weakens the Cadence to use the $\frac{6}{4}$ Chord here.

The following examples are wrong:

Ex. 169.



*1) The $\frac{6}{4}$ Chord should not progress with a skip into a *new* Chord. — *2) Two $\frac{6}{4}$ Chords in succession are forbidden (142 b). — *3) 226 d. — *4) 226 a, last clause. —

Exercise thirty-two.

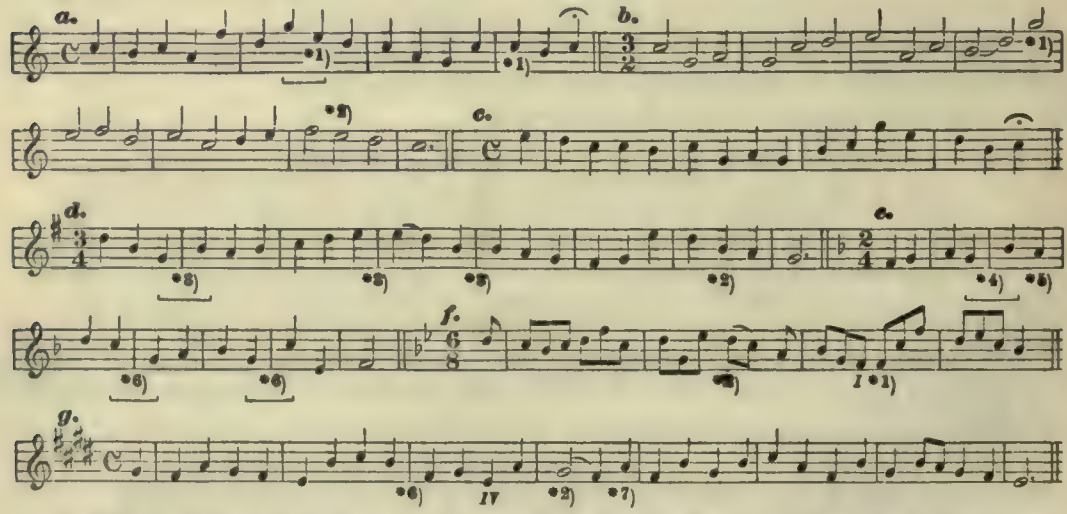
A. **Harmonize the following fragments of Melody, *at the Piano*, at sight, using the three Principal Triads and their first Inversions.**

Ex. 164 should be placed where it can be seen and referred to. The left hand can take the *Bass alone*, and the right the three upper parts together.

*1) May be either V or I. — *2) Cannot be the V, because the IV follows. — *3) Change the Chord at these Accents (225c). — *4) Cannot be the I, because the I follows, over the bar (note *3). — *5) Cannot be the I, because the next (accented) beat must be a I. — *6) A Melody is harmonized *according to the Scale-steps of the key it is in!* — The Scholar is recommended to play each of these melodic fragments in *C-Minor* also, and to extend the Exercise by writing them out *in different keys*, and harmonizing them as before, at sight. —

B. **Add the Bass and Middle parts to Ex. 167, and harmonize the following complete Melodies, with Principal Triads and their Inversions.**

The Bass part should be completed first, before the Middle parts are added.



*1) 225c. — *2) Must not be the I nor I_1, but the I_2 ($^6/_4$ Chords; see 160). — *3) When the Melody-notes are such that a Chord *must* be repeated over the bar, exception 154a must be resorted to: *i.e.* it must become a $^6/_4$ Chord on the accented beat. Attention is also directed to 154b and c. — *4) Where the V is *obliged* to progress into the IV, the irregularity is rectified by *inverting the second Chord* (or both Chords), thus: V—IV_1 or V_1—IV_1. This applies to *every irregular Concord-progression!* See 122a; 131; and 221, No. 23. — *5) The I_2 — 226b. — *6) These two notes must be harmonized with I and V, which, however, gives successive Positions of the Fifth. This irregularity, like that at note *4), is rectified by *inverting* the 2nd Chord, or both Chords. 221, No. 23. — *7) Ex. 88, note *2). —

Fundamental principles.

The 3rd Scale-step, as Melody-tone, is harmonized with the I; the 6th Scale-step with the IV; the 7th Step with the V. —

The Bass note must change at each Accent. —

Each Accent must be a *new* Chord, excepting when it is the 2nd *Inversion* of the preceding Chord. —

Root in Soprano, Third in Bass; and *vice versâ*. —

Irregular Chord-progressions, and false successive Positions, are rendered less objectionable by inverting the Chords. —

With Subordinate Chords.

227. The application of the Subordinate Chords, in harmonizing a Melody, is regulated chiefly by the principle that they only appear as *substitutes* for their respective Principal Chords. This is strictly true of the VI and III, whereas the II can also be used independently. Compare 94 a, and 220. — The details of their use are as follows:

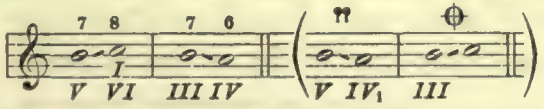
228. a. The VI can be used in place of almost any I, but especially when the latter is in 8ve Position (the 1st Scale-step as Melody-tone). Not, however, when the I is in the Position of the 5th; and, of course, not at the very beginning or end of the Phrase (225 a).

Ex. 170.

Both Inversions (VI$_1$ and VI$_2$) must be avoided.

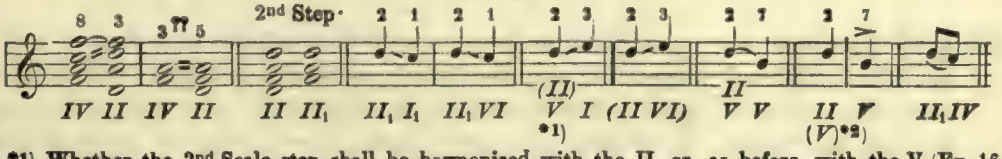
b. The III is only used in harmonizing **the Leading-tone, when it descends diatonically;** in which case it cannot be the V (as ordinarily), without involving awkward voice-progressions. The III$_1$ may also be taken, almost as well as the III; but never the III$_2$.

Ex. 171.



c. The II, on the contrary, can be used not only (like the VI) as a substitute for its Principal Triad, the IV (when the latter is in 8ve Position), but may also be employed as an independent Chord, *in harmonizing the* 2nd **scale-step.** In the latter case it is more likely to be the II$_1$ than the Triad II itself, according to 226 a. — The II$_2$ must be avoided.

Ex. 172.

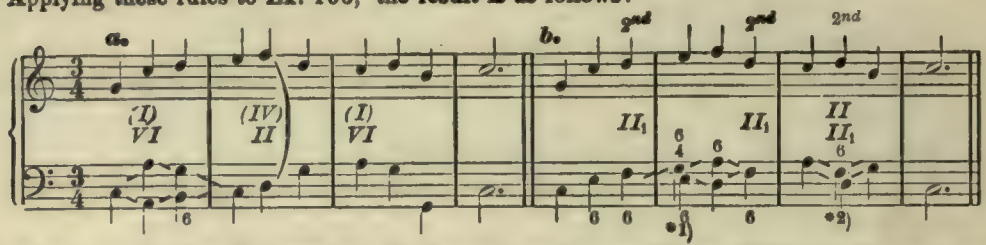


*1) Whether the 2nd Scale-step shall be harmonized with the II, or, as before, with the V (Ex. 164), depends chiefly upon the Melody-note *which follows*. If the 3rd Step follows (which must be the I), then

the V should be taken, because the II does not progress so readily into the I. — *2) At these Melody-notes it *must* be the II, on account of the Rhythm (225 c). —

Applying these rules to Ex. 166, the result is as follows:

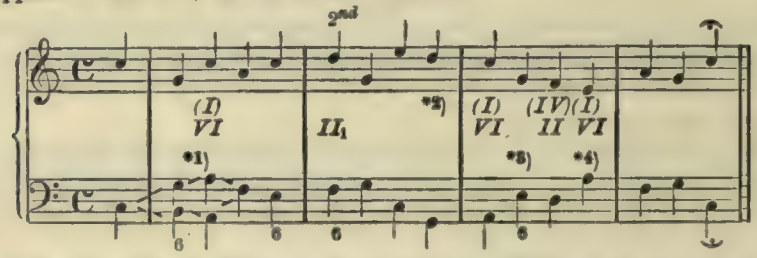
Ex. 173.



*1) The I_1 (*e* in Bass) is better than the I itself, notwithstanding the Third *e* in Soprano, because it affords *smoother voice-progression;* see Ex. 98, meas. 6. — But the I_2 is also good. — *2) Both II and II_1 are good.

When applied to Ex. 167, the result is as follows:

Ex. 174.

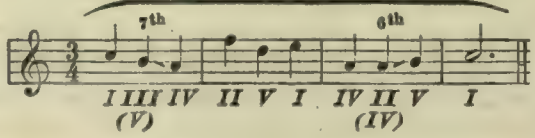


*1) The upper Bass notes are possible, but dangerous, on account of the parallel motion with the Soprano. The combination is foreign; see Ex. 84, meas. 5. — *2) Neither the II nor II_1 would sound well here. — *3) Must be the I_1 (not the I itself), because the VI precedes. See Ex. 96, meas. 4. — *4) Must be the VI, as the I would not sound so well after the II.

---

229. Just as the 7th step (Leading-tone), when it progresses diatonically in the wrong direction, is not harmonized with the V, but with its *Parallel* — the III (Ex. 171), so the 6th step ("Dominant Leading-tone"), when it progresses **diatonically upward**, instead of downward, will not be harmonized with the IV, but generally with its *Parallel* — the II. Thus:

Ex. 175.



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230. It is sometimes very convenient to harmonize certain sections of a Melody with *Successive Chords of the 6th*; especially when the Melody is smooth (diatonic). The Chords succeed each other without regard to their relations (see 131). Still, this style of Bass must not be used too freely. As a rule, *the Outer parts should move as much as possible in* contrary *motion, instead of parallel, as here.* For instance:

Ex. 176.

*1) Had better be the V, as momentary interruption of the 6ths.

Harmonizing successive tones together.

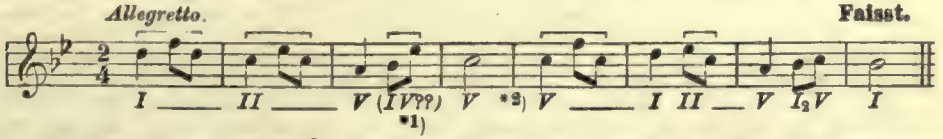
231. If an *accented* Melody-note and the following tone (or tones) represent the same Element or Chord, they may be slurred, as follows, and *harmonized together:*

Ex. 177.

*1) The $b\flat$ and g cannot be slurred in this case because they together represent the IV, *which will not follow the V* (on the 2nd beat). — *2) Whether the chord is merely *held* (as in the 1st meas.) or *repeated* in a different Inversion, will depend chiefly upon the Rhythm. The *principle* is the same in either case.

232. a. This principle applies most particularly to rapid Melody-notes, which result from the subdivision of a beat, as seen in Ex. 177, meas. 3, beat 2. — Such rapid notes, *when they belong to the same beat* (or *accent* — including two or more beats), are very often Intervals of the *same Chord*, especially when they are skips, and not only may but *should* be harmonized together. Thus.

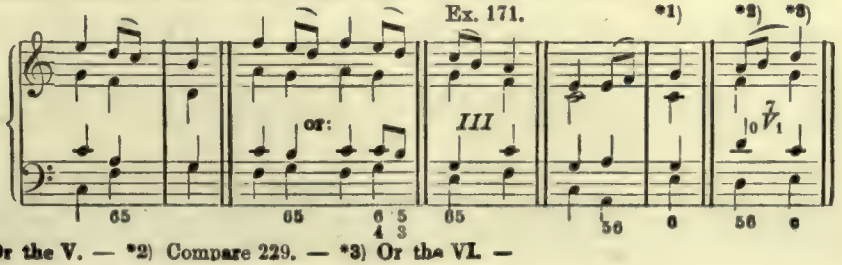
Ex. 178.



*1) Like Ex. 177, note *1), the $\flat$-notes should be VI—IV1. — *2) See 66 b (Ex. 58) in regard to the repetition of the V over the bar.

b. When the rapid notes are diatonic, instead of skips, as above, they will obviously not, as a rule, represent the same Chord. But they must, nevertheless, be harmonized as quietly as possible. Generally, a single *Bass tone* can be found which will agree with both Melody-tones, as, for instance, in Ex. 103, 104. Thus

Ex. 179.



*1) Or the V. — *2) Compare 229. — *3) Or the VI. —

233. Repeated Melody-tones may be harmonized with the same Chord (perhaps in different forms) or with different Chords, according to their rhythmic location.

When a Melody-note is repeated *from an unaccented to an accented beat*, it is very common to keep the *same Chord*, but to make it the 2nd *Inversion* ($^6_4$ chord) *on the Accent.*

See Exercise 32 B, note *3). For illustration·

Ex. 180.

Ex. 171.

*1) Ex. 172, note *2). — *2) It is better to harmonize these *short* Melody-notes with the $^6_4$ Chord, than with either the Triad or 6th, because it is the *lightest.* — *3) In this measure the harmony may be I — V_2 — I_1, in order to make the transient *d* a $^6_4$ Chord. — *4) Had better be the VI than the I_1, because there has been enough of the I just before. — *5) Might also be the V, but the II_1 gives more variety to the Bass. — *6) See 160. — *7) Attention is directed to the effect of the parallel 6ths in the two upper parts. See 221, No. 12. — *8) The Harmony of this measure might be I — I_1 — I_2, and the repetition of the I in the next measure would not be incorrect, because the 2nd measure is lighter than the 1st.

Exercise thirty-three.

The pupil is first referred to 238. —

Complete Ex. 175, 176, 177 and 178. And harmonize the following Melodies with the following Chords: I — I_1 — I_2; IV — IV_1 — IV_2; V — V_1 — (V_2); II — II_1; VI; III — (III_1).

*1) 228 a. — *2) 228 c. — *3) As Cadence Chord, must be the V — not the II! — *4) 228 b. — *5) V or II_1. — *6) Ex. 175. — *7) 231. Observe the slurs. — *8) 160. — *9) 232. — *10) In *Minor*, the choice of Chords is more limited than in Major. The III cannot be used at all, nor is the II itself good (191 c). The only Subordinate Chords that can be freely used in Minor are *the VI and II_1*. — *11) Can be the same Chord throughout the measure, but must be *repeated* (perhaps with Inversion), not *held*, on account of the Rhythm. — *12) Exercise 32 B, note *6). — *13) Ex. 179. — *14) Ex. 180. —

Fundamental principles.

The VI is only available as substitute for the I, at the 1st Scale-step.

The II may replace the IV (at the 4th step), or may be applied to the 2nd Scale-step

The descending Leading-tone is harmonized with the III.

The ascending 6th step is harmonized with the II.

Tones which belong to the same beat or accent may, if parts of the same Chord, be slurred, and harmonized together.

A Melody-note, repeated over an accent, generally becomes a $^6/_4$ Chord

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With Dominant Discords.

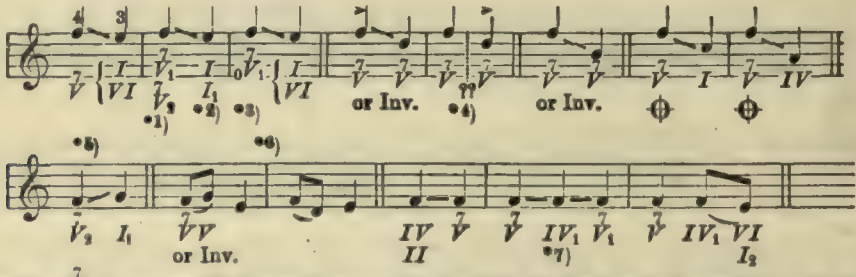
234. The employment of Dominant Discords not only improves the Harmony, but also facilitates very much the harmonizing of certain Scale-steps. The Dissonances of the Dominant (the Seventh and Ninth) are the 4th and 6th Scale-steps. In the foregoing Exercises these Steps demanded *Subdominant* Chords (IV or II), which, however, are sometimes noticeably inappropriate. At such places, the advantage of substituting a First-Class (Dom.) Discord for the Second-Class Concords (IV or II) is obvious.

235. The Five-seven can be used, equally well in Major and Minor·

1stly, and in general, *wherever the Concord V and its Inversions are possible.* Which *form* of the Chord is used, (whether the $\overset{7}{V}$ — $\overset{7}{V}_1$ — $\overset{7}{V}_2$ — $\overset{7}{V}_3$ or $\overset{7}{V}_0$), will depend partly upon the progression of the Bass part (see 226 b), partly upon the Melody-note, (which will seldom, if ever, be *doubled in Bass*), and partly upon the *following* Melody-tone.

2ndly, and in particular, the $\overset{7}{V}$ can be used in harmonizing the 4th Scale-step, when the latter descends. For illustration.

Ex. 181.



*1) Not the $\overset{7}{V}_3$, because the Seventh cannot be doubled in Bass and Soprano. — *2) Not the VI: see 177 b. — *3) The Incomplete $\overset{7}{V}$ should be used as Chord of the 6th: see 189 c. — *4) Not good, on account of the Rhythm. — *5) This is the one possible case where the *ascending* 4th step may be harmonized with a Dom. Discord; but it is rare· see Ex. 133 a. — *6) See Ex. 131 a. — *7) Passive Res. — see Ex. 132.

236. The Five-nine, as stated in 197, should be used almost altogether in its *Incomplete* form. And a distinction must be made as usual between its application in *Major* and *Minor*.

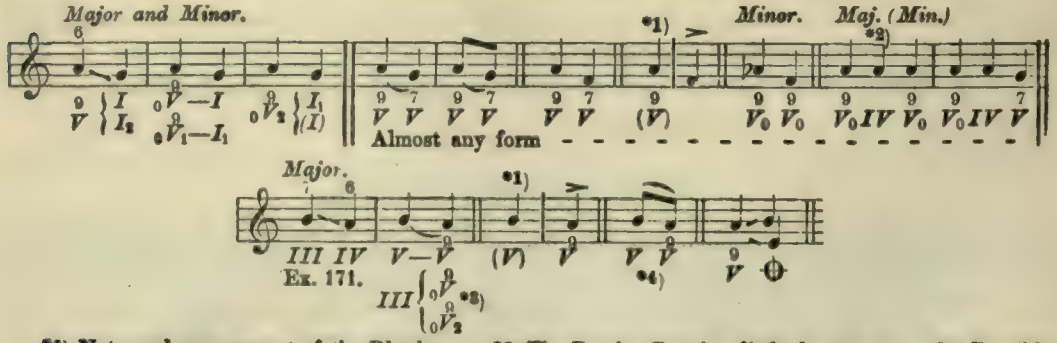
a. In Major, it can only be used, safely, in harmonizing the 6th Scale-step, when it descends. This places the Ninth in Soprano, and ensures the admissibility of any legitimate Inversion (Ex. 143).

b. In Minor, the $\overset{9}{V}$ (generally Incomplete) may be used·

1stly, and in general, *wherever the $\overset{7}{V}$ and its Inversions are possible.* (Ex. 181.)

2ndly, and in particular, as in major, in harmonizing the 6th Scale-step (descending). For illustration:

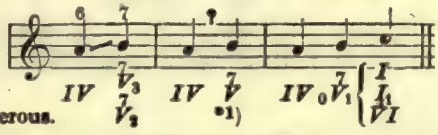
Ex. 182.



*1) Not good, on account of the Rhythm. — *2) The Passive Res. is a little dangerous. — *3) Possible, but of doubtful quality. — *4) More likely, in such rapid time, to be the same Chord (V—$\overset{9}{V}$) and *same Bass tone*, than the usual III — IV.

237. As stated in 229, the ***ascending*** 6th Step is generally harmonized with the II instead of the usual IV. But the IV may be used, even in this case, if the following tone (the Leading-tone) is harmonized with a Dom. ***Discord***, instead of with the ***Concord*** V. The best of the Dom. Discords for this purpose is the ${}_0\overset{7}{V}_1$, which then progresses either into the I or VI (Ex. 181, meas. 3):

Ex. 183.



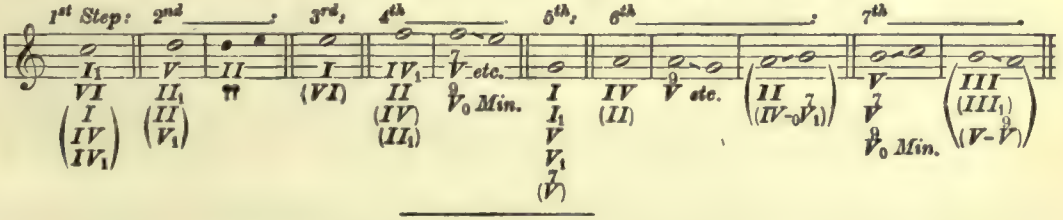
*1) The $\overset{7}{V}$ *itself* is dangerous.

238. The following general principles and directions should always be borne in mind, in determining the harmonic basis of a Melody

1. **Always look forward.** Never define the Chord of any melody-note without considering its relations to, and possible influence upon, the *following* tone or tones.
2. The attention should be directed chiefly to the Accented beats. The unaccented notes are of less importance, and must accommodate themselves to the Chords which the accented beats require.
3. Mark, at the outset, all those Scale-steps which can be relied upon with reasonable certainty, throughout the Phrase. Namely: the very first Chord (I); the Semicadence (generally V, or $\overset{\frown}{I_2 — V}$) and the Perfect Cadence (V — I, or $\overset{7}{V}$ — I, or $I_2 — \overset{7}{V}$ — I); the 3rd step (I); the 7th step (V etc,); and the 6th step (IV or $\overset{9}{V}_0$).
4. *After doing this*, sing (or play) the Melody through once or twice in correct time and rhythm, and endeavor to discern its harmonic basis by instinct (by "ear", applying slurs where successive tones (of the same beat or accent) evidently or *probably* belong to the same Chord.

239. The following table, in which the ***most natural and probable*** harmonic basis of each Scale-step is again shown, as summary of the rules of this Division, should be thoroughly memorized:

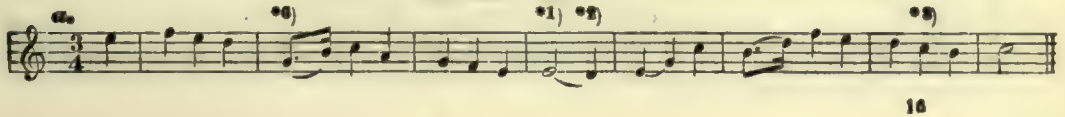
Ex. 184.

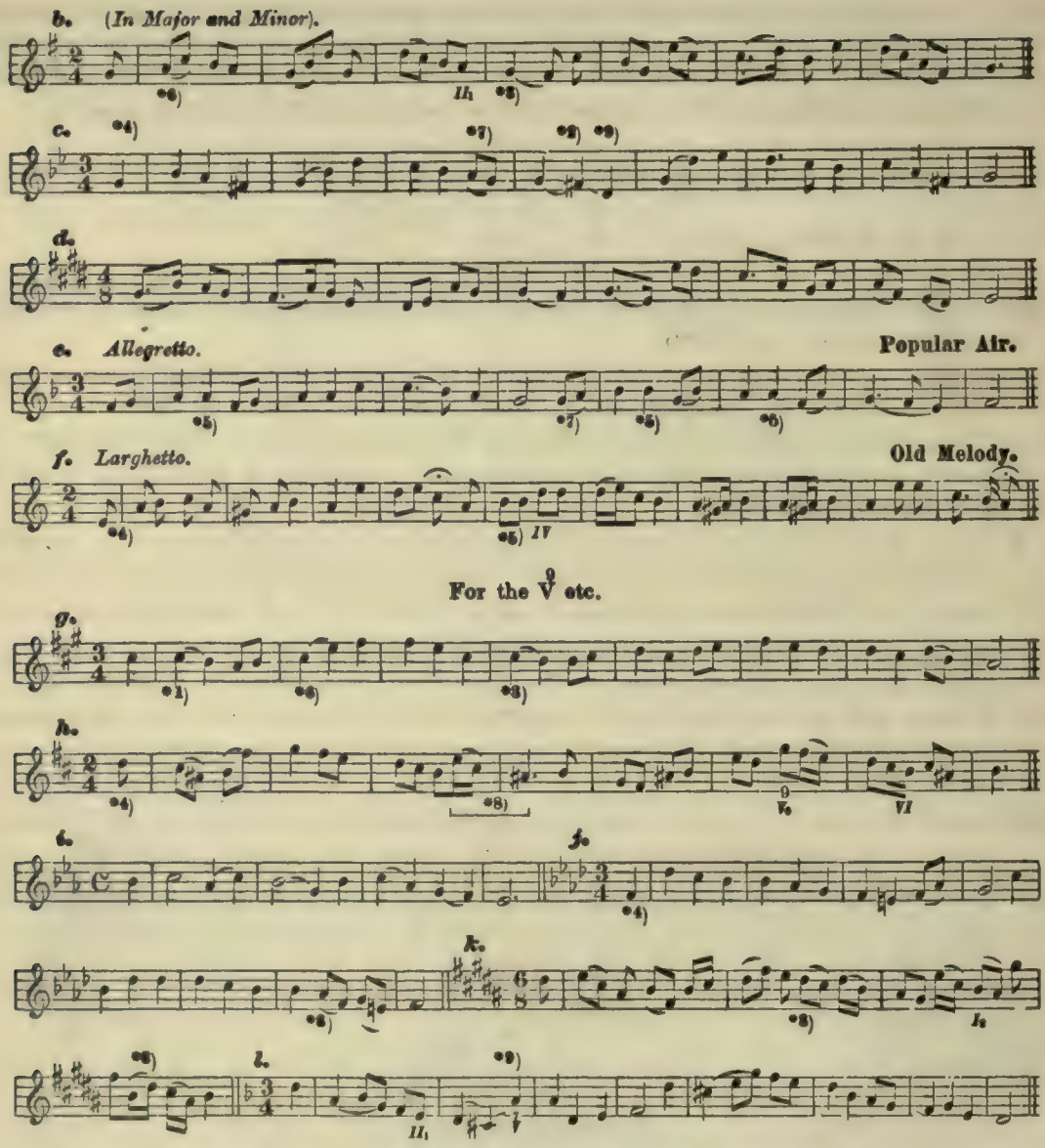


Exercise thirty-four.

Play Examples 181, 182 and 183 at the Piano, in 4-part Harmony, the *Bass alone* in the left hand, as before. — And harmonize the following Melodies with the usual Concords, and First-class Discords.

For the $\overset{7}{V}$ etc.





*1) Ex. 180 a. — *2) The *Semi-cadence* Dominant should not be a **Discord**, as it would make the cadence too weak and unquiet; the *V itself*, not the V̊, must be used. At the Perfect Cadence, on the contrary, the Dom. Discords are excellent. — *3) 160. — *4) It must be remembered that there are *two* Leading-tones in Minor. See also Exercise 33, note *10). — *5) It is more consistent with the character of this Air to retain and simply repeat the Chord, at these repeated Melody-tones. Compare 233. — *6) 232 a. As before, the *slurs* indicate which tones may be harmonized together. — *7) 232 b. — *8) 225 c. — *9) When the Leading-tone (in the Melody) progresses with a *skip*, it is evident that the Dom. Chord must be repeated. The I would be impossible here. —

N. B. The pupil may extend this Exercise by re-harmonizing the Melodies of Exercises 32 and 33, with *Dom. Discords*. This he is warmly recommended to do, as nothing is more important than the ability *to harmonize Melodies* with facility, and nothing conduces more directly and surely to this end than *practice*. Exercise 47 B, Melodies 1 to 4 may also be added.

Fundamental principles.

Dominant Discords are used, in general, in place of Dom. Concords.

The $\overset{7}{V}$ etc. harmonize the 4th Scale-step; the $\overset{9}{V}$ etc. (usually Incomplete) harmonize the 6th Scale-step, — when they descend.

The ascending 6th step may be the IV, if a Dom. *Seventh* follows.

Never define the Harmony of any single *Melody-tone! Always look forward, at least to the following* Accent!

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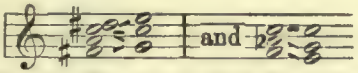
240. The Discords of the 2nd Class are of such comparative unimportance that it is unnecessary to make any special application of them here. All that need be said is, that the $\overset{7}{II}$ and Inversions may be used, in general, *wherever the IV or II are possible;* and, in particular, in harmonizing the *Tonic note* (the Seventh of the II) when it *descends*. The pupil may test these rules by introducing an occasional $\overset{7}{II}$ in the Harmony of the following Melodies. Exercise 33, a, c, h; Exercise 34, j. — The 3rd and 4th Discord-classes can not be considered at all, in this place. Their most natural uses will be seen later on.

Division D. The Altered and Mixed Chords.

241. Altered and Mixed Chords contain one or more tones written with Accidentals (♯, ♭ or ♮) and therefore foreign to the *Scale* in which they appear, but nevertheless, from their connections and their effect, obviously belonging to the *Principal Key* of their Phrase, and not to that Key which the chromatic (foreign) tone seems to indicate.

For example, the Chords ·  and many others, are used in *C*-Major as if they were legitimate Chords of that Key (despite the $d\sharp$, $f\sharp$ and $a\flat$), and without disturbing the identity of *C*-Major by distinctly conveying the impression of the Keys which these foreign tones *actually* belong to.

242. a. Such Chords are called "Altered" or "Mixed" (according to 244), and the foreign tone, which is "borrowed" from a related Scale, is defined as a chromatically **Raised** or **Lowered Scale-step** of the original Key.

b. That a Key and Chord may embrace a chromatic tone, foreign to its Scale, is a fact which, contradictory as it may appear, is confirmed on every page of classical music. In truth there are *many* cases, (which will presently appear), where a tone cannot be accounted for in any other way.

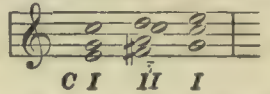
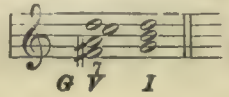
c. The object of such foreign tones is to enlarge and enrich the scale; to confirm the melodic tendency of certain tones (as lowering the 6th step — in *C*-Major *a* to $a\flat$, or raising the 2nd step — *d* to $d\sharp$); to contradict the tendency of others (as raising the 4th step — *f* to $f\sharp$); to convert Inactive tones into Active (as raising the 1st and 5th steps, whereby they acquire a tendency upward); and to affiliate the Keys, by increasing the number of common tones; (for instance: by raising the 4th step of *C* to $f\sharp$, the scales of *C* and *G*-Major are affiliated).

243. It is evident that such foreign tones can only be introduced into a Scale upon certain conditions, and under certain favorable circumstances. The conditions are as follows:

a. The altered tone must be reasonably brief; otherwise it may, by sheer length, assert its independent individuality and produce the impression of the Scale to which it actually belongs. The limit will generally be one or two beats

b. It must occur in such a connection as not to interfere with the legitimate harmonic action of the Key. Hence, only *certain steps* of the Scale can be altered, and these only in *certain Chords*.

c. The most important condition is, that the following *Chord shall unmistakably indicate and confirm the original Key:* that is, the Altered Chord will (as a rule) be immediately *followed* by a Tonic Chord (I—I_1—I_2), or, more rarely, by a V or $\overset{0}{V}$

d. When the Chord which *follows* (and, as is probable, the Chord which *precedes*, also) confirms the original Key, then *no change of Key takes place*, and the foreign tone is merely a *casual* chromatic inflection of the corresponding Scale-tone. In this case:  the accidental is not an actual $f\sharp$, in its legitimate personality as Leading-tone of *G*-Major, but merely "*f*-raised" or "*f*-altered" — not "*f*-sharp" in the ordinary sense. But if, on the contrary, the next Chord corroborates the foreign tone, as Tonic Chord of the Key which that tone seems to represent, thus  then it proves to be an *actual* $f\sharp$, in its genuine capacity as Leading-tone of *G*-Major.

e. In a word, as a general fundamental rule *one Chord alone does not represent and indicate a whole Key*, any more than one isolated tone can represent a Chord or Scale. If a foreign Chord stands isolated between two Chords which are unmistakably indicative of the original Key, then it also *belongs to that Key* — of course, as *Altered* Chord; but, if the following Chord confirms the Key suggested by the foreign tone, then these two Chords *together* constitute a more or less complete Modulation, or change of Key. —

The Altered Chords may be regarded as Imperfect or Transient Modulations; the preparatory, or transitive stage of Modulation: a Modulation begun, but not fully carried out. —

244. The Altered Chords have a *legitimate Chord-form*, and are therefore identical with authentic Chords of some other Key. The Mixed Chords have an illegitimate Chord-form, and do not occur, naturally, in *any* Key. Both the Altered and Mixed Chords are defined according to the *Scale-step* which is inflected.

Section 1st. The Altered Chords.

A. In Major.

245. The 6th step may be lowered, in the following Chords:

Ex. 185.

*1) Spoken: "Five-nine-altered". The flat indicates that the Chord contains a *lowered* Scale-step. — *2) These three Chords are possible, but very rare.

246. The Introduction and Progression of these, and all other Altered Chords, are subject to the following rules:

a. Lowered notes descend. Raised notes ascend. Comp. 168. —

b. Altered notes must not be doubled. —

c. *In general*, the Altered Chords are treated the same as if unaltered. The principal exception is 243 c: *i. e.* they generally resolve into the I (or Five-seven). —

d. The altered note may be introduced *diatonically* (*e. g.* the tone $a\flat$ from g), or *chromatically* (*e. g.* the tone $a\flat$ from a).

A progression is *diatonic* when the *letter* is changed; *chromatic*, when only the *accidental* of the *same letter* is changed: See 290. —

e. In chromatic successions the *first* tone should not be doubled, unless the other tone (the duplication) progress *diatonically contrary to the direction of the chromatic progression*: See Ex. 186—8, 9. And the chromatic progression must be made in *one single part*: Ex. 186—10. —

The Intr. and Prog. of the above Chords, with lowered 6th step, are effected as follows.

Ex. 186.
C-Major.

*1) With $e\natural$, as I of *C-Major*, the preceding Chord is *Altered*, in that Key. — *2) With $e\flat$, as I of *C-Minor*, the preceding $a\flat$ becomes a *legitimate* Scale-tone, and the Chord is authentic in *C-Minor*. See 243 d. — *3) This is the Chord of the Diminished Seventh, the use and advantages of which, in *Major*, were intimated in 205, which see. — *4) The altered tone may lie in *any* part. — *5) Compare 243 a. — *6) This example is wrong, because the a, which is about to progress chromatically into $a\flat$, is doubled in Bass, where it *progresses with a skip*. — When the duplication progresses *diatonically*, as in the Bass (and Soprano) of the following measure, the irregularity is rectified: See 246 e. — *7) The chromatic progression can not be divided between two parts, as here between Bass and Soprano. 246 e. —

247. a. The raised 2nd step, when alone, can only occur in Chords of the **First Class**; *i. e.* **Dominant Chords.**

b. The raised 4th step can never occur in any other than **Second-Class Chords**; *i. e.* **in the** $\overset{7}{\text{II}}$—IV—$\overset{7}{\text{II}}$—IV.

c. The 2nd and 4th steps may be raised together; but (on account of the 4th step) only in a **Second-Class Chord.** Compare 247 a.

Ex. 187.
C-Major.

*1) Spoken "Five-altered"; the ♯ indicates that the Chord contains a *raised* Scale-step. — *2) It will be noticed that most of the Altered Chords of the 2nd Class progress into the I_2 ($^6_4$ Chord). — *3) The progression into the $\overset{7}{\text{V}}$ re-establishes the original Key, and is therefore admissible; but it is rare, and does not sound genuine. The chromatic progression, in this singular instance, will be divided between two parts, because the raised step *must ascend.* — *4) In this case the *f*♯ can hardly be termed a raised 4th step of *C*. This progression will be elucidated later. — *5) The two sharps above the II indicate that the Chord is "double-altered". — *6 This Inversion of the Altered $\overset{7}{\text{II}}$ is somewhat rare. The Passive Res. of the Seventh in the lowest part is irregular. See Ex. 151, note *10). —

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248. The following alterations are *much less common*:

a. The 5th **step** may be **raised**; but only in the I or $\overset{7}{\text{I}}$.

b. The 1st **step** may be **raised,** in the I or VI ($\overset{7}{\text{VI}}$).

c. The 6th **step** may be **raised,** *but only in connection with the raised 1st step,* — **never alone.**

d. The raised 1st step, or 1st and 6th steps, must be followed by a Dominant-**Seventh,** — not by the V itself.

Ex. 188.
C-Major.

*1) Thus marked to indicate that the *Fifth* is raised: Comp. note *3). — *2) The resolution of the Altered tone (upward into *a*) renders the IV necessary, as Resolution of this Altered Chord. This is not directly contradictory of 243 c, because the IV does not unmistakably confirm the *g*♯ as Leading-tone of *A*-Minor. — *3) This notation denotes that the Root of the I is raised. Comp. note *1). — *4) 248 d. See note *6). — *5) When the VI is *Altered*, its Seventh will *remain stationary* — contrary to Ex. 158. — *6) If the V itself were to follow, these Chords would both be in *G-Major*, as II and I! The V, on the contrary, re-establishes the original Key (*C*).

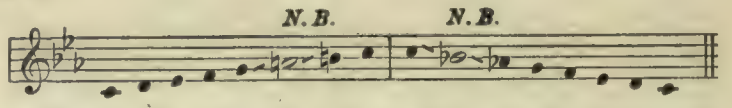
In the following additional illustrations of the Altered Chords in Major, the numbers after Mendelssohn's name refer to his "Songs without Words":

Ex. 189.

B. In Minor.

249. **The Alterations of the *minor* Scale tend chiefly towards removing the unnatural chromatic-interval progressions, from one Leading-tone of the harmonic scale to the other (6th and 7th steps). See Ex. 71. For this purpose the 6th step is raised in the *ascending* scale, and the 7th step is lowered in the *descending* scale. These alterations nullify the tendency of each original Leading-tone, and are the modifications upon which the Melodic Minor Scale is based. See Ex. 69; Ex. 70; paragraph 85.**

Ex. 190.



Transpose this Example into every other Minor Key. — These Alterations prove conclusively that a Key *may* embrace tones which are foreign to its Scale, or, in other words, that a Scale may, under certain circumstances, contain the *same letter* in different notation (242 b). While it may be a matter of opinion, which of the above tones is the *legitimate* Scale-tone (whether $a\flat$ or $a\sharp$, $b\sharp$ or $b\flat$) it has never been contested that they *both* appear, and are *both* necessary (in their respective places) in the same minor Scale! From this the inference may be naturally and correctly drawn: that if *C-Minor*, for a sufficiently good reason, can have an $a\sharp$ or $b\flat$, then *C-Major*, for an equally satisfactory reason, may take an $a\flat$ or $f\sharp$, $d\sharp$, etc.

250. The Altered Chords in Minor do not endanger the identity of their Key as much as those in Major do. Hence it is not so essential that the I or $\overset{7}{V}$ should follow immediately (compare 243 c). The Chord which follows will depend upon the tendency of the Altered tone, which, of course, must be fulfilled.

251. **The raised 6th step, as factor of the ascending Melodic Minor scale, is generally introduced diatonically from *below*, and progresses diatonically *upward* (as seen in Ex. 190). It occurs in the following Chords, and is invariably resolved into Dom.-Chords.**

Ex. 191.

*1) Neither the $\overset{9}{V}$ nor $\overset{9}{V_0}$ can contain the raised 6th step, because it would interfere with the resolution of the Ninth (downward). — *2) The Altered II of Minor requires a free resolution of its Seventh, in order to avoid a duplication of the Leading-tone. It can skip down to the Dominant or progress upward in parallel 3rds with the Bass. Compare Ex. 151, note *9). — *3) The raised 6th step occasionally enters with a skip *from above*. Comp. 174. — *4) See 250.

252. **Sometimes the 4th step is raised, in conjunction with the raised 6th step, in order to improve the *sound* of the Chords.**

As stated in 247 b, this Alteration is limited to *Second-Class* Chords, — II—IV—$\overset{7}{II}$—$\overset{7}{IV}$. One advantage arising from this double-alteration is, that the Chords can *progress into the I*, as well as into the V; in which case the raised 6th step is relieved of its obligations, and may progress in either direction.

Ex. 192.
C-Minor.

*1) Ex. 191, note *2). — *2) The raised 6th step, when accompanied by the raised 4th step, may move either way. — *3) Ex. 187, note *2). — *4) See note *2). —

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253 The lowered Leading-tone, as factor of the descending Melodic Minor scale, is introduced diatonically from *above*, and invariably progresses diat. *downward* (as seen in Ex. 190). It occurs most naturally and frequently in the $\overset{7}{\text{I}}$ (which it renders possible in Minor — see Ex. 155, note *3), and in the III or $\overset{7}{\text{III}}$, which it improves. See Ex. 160, note *2). —

Ex. 193.
C-Minor.

*1) The lowered Leading-tone resolves downward into the 6th step; consequently the resolving Chords will be the IV or $\overset{(7)}{\text{II}}$, not the V or I, as usual. See 250.

254. The lowered 7th step may, of course, also occur in *Dominant Chords*, but it is dangerous to alter the Leading-tone in the very Chords which it ought to characterize. Therefore *these* Altered Chords are *very rare*.

Ex. 194.
C-Minor.

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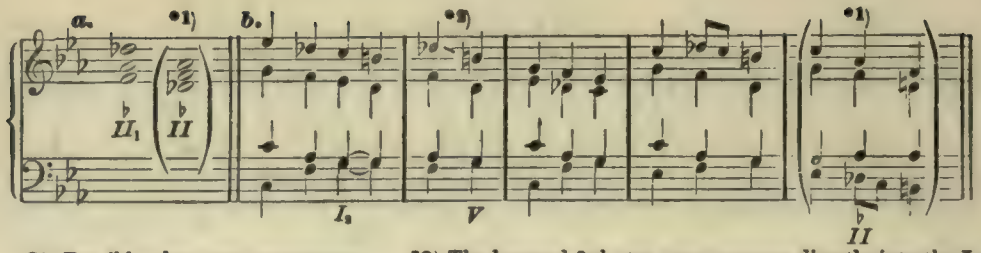
255. The 2nd step may be lowered, but only in one single Chord, the II_1, with which it consequently identifies itself. This Alteration is very common and effective.

Ex. 195.
C-Minor.



*1) Possible, but very uncommon. — *2) The lowered 2nd step may progress directly into the Leading-tone, even in vocal music, notwithstanding the peculiar interval-progression. Compare Ex. 71. —

Additional illustrations of the Altered Chords in Minor:

Ex. 196.

*1) "Songs without Words". — *2) Here, both altered steps progress chromatically downward. This is unusual, and very irregular. Compare Ex. 187, note *4). — *3) Ex. 195, note *1). —

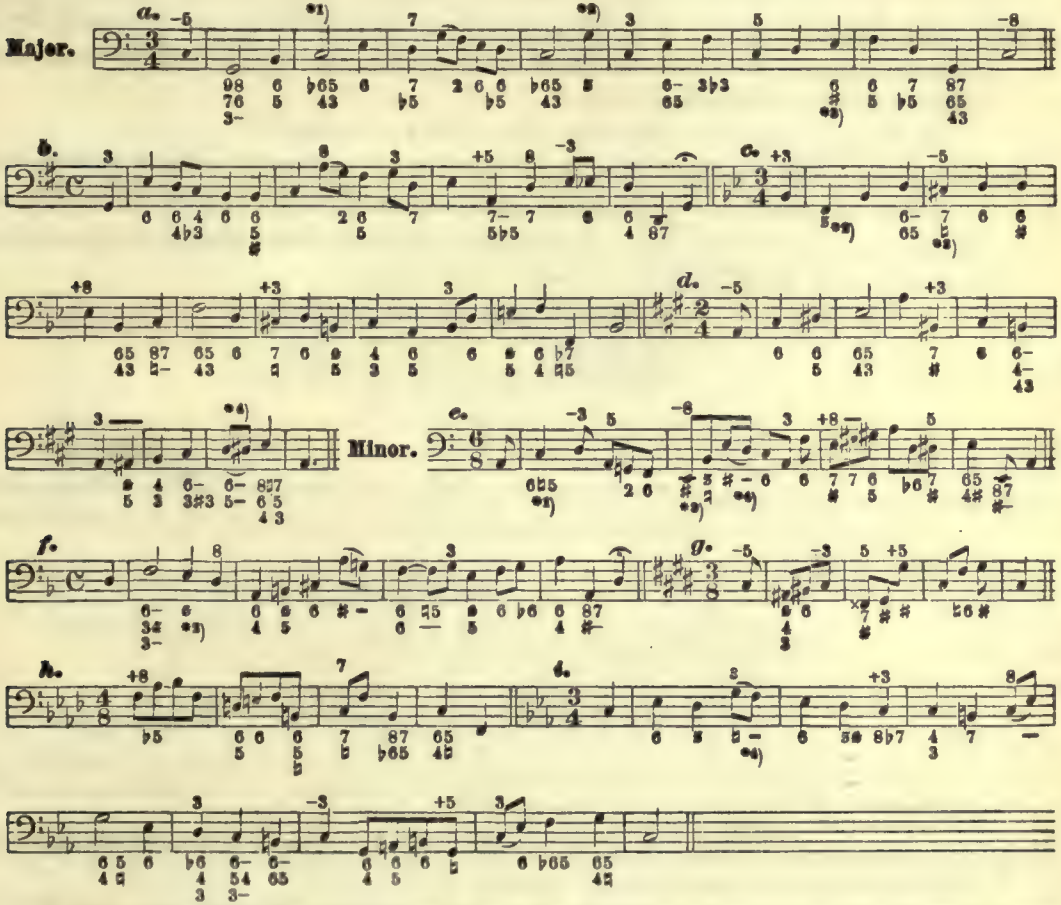
Exercise thirty-five.

A. Play the following Chord-progressions at the Piano, at sight, in *different* Keys; the Bass part *alone* in the left hand, and the three upper parts in the right:

Major: I_1—$_0\overset{9\flat}{V}_2$—I ‖ I—$\overset{\flat}{IV}$—$\overset{7\flat}{II}_1$—I_2—V ‖ I—$\overset{\sharp}{V}$—I ‖ VI—$\overset{\sharp}{II}_2$—I_2—V ‖ I_1—$\overset{7\sharp}{II}_1$—$\overset{7}{V}$—I ‖ I—$\overset{7\sharp\sharp}{II}_2$—$I_2$—$\overset{7}{V}$ ‖ I_2—$\overset{7\sharp\sharp}{II}_1$—$I_2$—$\overset{7}{V}_3$—$I_1$ ‖ I_1—$\overset{5\sharp}{I}$—IV—V ‖ I—$\overset{7\sharp}{VI}_1$—$\overset{7}{V}_2$ ‖ I_1—$\overset{7\sharp\sharp}{VI}_2$—$\overset{7}{V}_3$—$I_1$ ‖ —

Minor: I_1—$\overset{5}{II}$—$\overset{7}{V}$—I ‖ I_1—$\overset{7\flat}{IV}_3$—$_0\overset{7}{V}_1$—I ‖ I_2—$\overset{7\flat}{VI}$—$\overset{7}{V}_1$—I ‖ I_1—$\overset{5\sharp}{II}$—V—I ‖ I_2—$\overset{7\flat\sharp}{II}_1$—$I_2$—$\overset{7}{V}$ ‖ IV—$\overset{7\flat\sharp}{IV}$—$I_2$—V ‖ I—$\overset{7\flat}{I}$—IV—I ‖ I—$\overset{7\flat}{I}_3$—$\overset{7}{II}_2$—$I_2$—V ‖ VI—$\overset{\flat}{III}$—IV—V ‖ I—$\overset{\flat}{V}_1$—$IV_1$—V ‖ I—$\overset{\flat}{II}_1$—$I_2$—V ‖ I—$\overset{\flat}{II}_1$—V—I ‖

B. Work out the following Basses in the usual manner, and analyze them, with special reference to the Altered Chords. Review the directions given before Exercise 15 and Exercise 30. —



*1) The Accidentals in the Bass-figuring refer to the figure that *follows*. — *2) A line through a figure signifies, as usual, that the corresponding tone is *raised*. — *3) A solitary Accidental always refers to the figure 3. — *4) Ex. 107, note *1).

Fundamental principles.

An Altered Chord must be followed by a Chord which confirms and re-establishes the original Key; otherwise it becomes a Modulation. —

In Major, *only* the 6^{th} step can be lowered; but almost every step can be raised. —

The raised 4^{th} step can only occur in a Second-Class Chord. —

The raised Tonic, or Tonic and 6^{th} step, must be followed by a Dominant-*seventh*. —

In Minor, the 6^{th} and 4^{th} steps can be raised; the 7^{th} step, and the 2^{nd} step, may be lowered. —

Section 2nd. The Mixed Chords. (244).

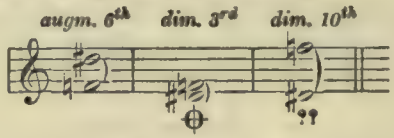
A. In Major.

256. a. The distinctive feature of the Mixed Chords is the interval of an augmented 6th, which they all contain, and which results from associating or "mixing" characteristic tones of different Scales, in the same Chord.

For this reason they are generally called "Chords of the Augmented 6th".

b. One of the most important rules for the treatment of Mixed Chords is, *that this interval (the augm. 6th) should not be* inverted. Thus, the interval $f\sharp—d\sharp$ (in Ex. 198) should not become the *dim.* 3rd $d\sharp—f\sharp$. An exception is allowed when the inverted tones lie *more than an Octave apart*, but it is *very rare*. For example:

Ex. 197.



257. a. There are two kinds of Mixed Chords in Major: 1stly, those of the **First Class**, containing a raised 2nd step, in conjunction with the Seventh (or Seventh and Ninth) of the Dominant. Compare 247 a

Ex. 198. *C*-Major.

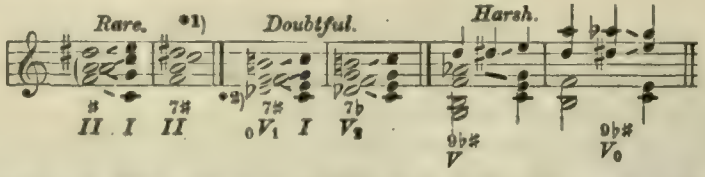
*1) The augm. 6th arises from the association of the Dom.-Seventh of one Key (*f*, of *C*-Major) with the Leading-tone of another ($d\sharp$, of *e*-Minor). — *2 Ex. 197, meas. 3. — *3) The raised step generally lies *in the Soprano*, even when the Major Dom.-Ninth accompanies it; comp. 193 a. —

b. This same augm. 6th is sometimes used (especially by **Schubert**) in a *Second*-Class Chord, II or $\overset{7}{\text{II}}$; but it is evidently not quite genuine. Further,

c. The 2nd step is sometimes **lowered**, in the Dom. Discords. This, also, is of doubtful quality. Finally,

d. In some extreme cases the **Minor** Ninth (lowered 6th step) is associated with the raised 2nd step in these First-Class Chords; but the Discord is very harsh.

Ex. 199.



*1) These Chords are more likely to be Mixed Chords of the Relative Key (*A*-Minor): See Ex. 204. —
*2) The lowered 2nd step usually lies *in Bass*. These two Chords are probably in *F*-Major (Ex. 201). —

258. The Mixed Chords of the First Class all resolve into the Tonic Chord (I, and Inversions). Thus·

Ex. 200.
C-Major.

*1) The raised 2nd step may enter with a skip, but only from *above*. Comp. 174.

259. 2ndly, those of the Second Class, containing the lowered 6th step, in conjunction with the raised 4th step, or raised 4th and 2nd steps. (Comp. 247 b.)

Ex. 201.

*1) The Mixed IV sounds best in this Position (Seventh in Soprano).

The Second-Class Mixed Chords, also, resolve into the Tonic Chord (258). Thus:

Ex. 202.

*1) The *lowered* step generally lies in *Bass*, and one of the raised steps in *Soprano*; Comp. Ex. 198, note *3). — *2) This irregular interval-progression ($c - d\sharp$) is allowed; especially in a Middle part. — *3) Ex. 197, meas. 3. This irregularity is less objectionable in this Mixed Chord. — *4) The resolution into the Dom.-*Seventh* is possible. Comp. Ex. 187, note *3). — *5) Comp. Ex. 201, note *1).

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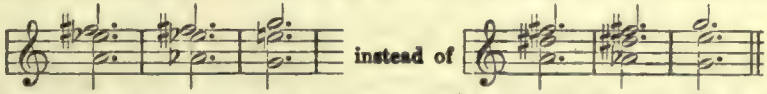
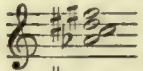
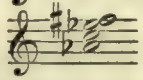
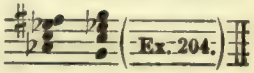
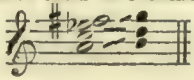
260. The raised 2nd step, in these Second-Class Mixed Chords, is often erroneously written as if it were the *minor Mediant*: *e. g.* in *C*-major, $e\flat$ instead of $d\sharp$. See **Mendelssohn**, No. 34, measures 38 and 39:



See also No. 42, measure 4 ($d\flat$ for $c\sharp$); and No. 38, meas. 14 ($e\flat$ for $d\sharp$). This common error is probably owing to an instinctive reluctance to associating $d\sharp$ with $a\flat$ when $e\flat$ appears to be so much more plausible and natural; or it may also be owing to a thoughtless confusion of the Major and Minor Modes. *C*-Major cannot have an $e\flat$, as that is the very tone which distinguishes it from *C*-Minor, as seen in Ex. 186, meas. 1, 2. — The difference lies simply in the *progression* of the Chord, to which, in analogy with 243 c, the notation should conform.

Thus:  is a *C-Major* Chord, and progresses to th. I of *C*-Major

But  is a *C-Minor* Chord, and progresses to the I of *C*-Minor 

If in *G-Major*, then, of course, the $e\flat$ will be right: 

Additional examples of the Mixed Chords in Major:

Ex. 203.

*1) "Rheingold", 1st Scene: the Harmony employed where the Rhine-daughters chant their exuberant admiration of the glowing gold. — *2 The modification of the same Harmony in the final Scene of the Opera, where they bewail the loss of the robbed treasure.

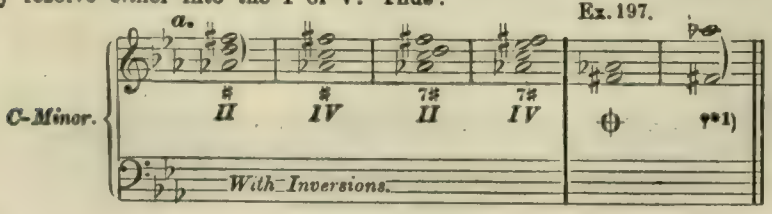
B. In Minor.

261. There is only one group of Mixed Chords in Minor. They contain a **raised 4th step,** and are consequently Second-Class Chords (247 b). The augm. 6th results from the association of the raised 4th step with the original Dom.-Leading-tone: Ex. 204 a.

Compare these Chords with the corresponding Altered Chords (with *raised* 6th step), in Ex. 192 a. They resolve either into the I or V. Thus:

Ex. 204.

Ex. 197.



*1) The inversion of the augm. 6th is *least* objectionable in these Mixed Chords of Minor. — *2) These irregular interval-progressions are allowed. — *3) The Resolution of this (the most frequent) form of the $\overset{7\sharp}{IV}$ *into the V* involves inevitable parallel 5ths. Therefore it is wise to progress, as a rule, *into the I.* — *4) Compare Ex. 202, note *4).

Additional Examples of the Mixed Chords in Minor:

Ex. 205.

Exercise thirty-six.

*1) Do not overlook the Resolution of the Seventh! — *2) Rhythm ♩ ♪♪. — *3) Ex. 107, note *1). *4) Rhythm ♪ ♬. —

These Basses must be carefully analyzed, as usual. — The Positions may be ignored. —

Fundamental principles.

All Mixed Chords contain the interval of an augm. 6th.

This interval must not be inverted, unless the tones lie more than an octave apart.

There are two kinds of Mixed Chords in Major: the Discords of the *First* Class, with raised 2nd step, and Second-Class Chords with lowered 6th step, combined with the raised 4th, or 4th and 2nd, steps.

Mixed Chords generally resolve into the Tonic Chord.

The Mixed Chords of Minor belong to the Second Class, and contain the raised 4th step. —

PART III.

MODULATION.

Section I[st]: Key-relations.

262. **Modulation** treats of the process by which a transition is made ***from one Key or Mode into another***. This transition is effected, in general, by inflecting one or more tones of the first Key upward or downward, ***whereby the location of the half-steps*** is changed, and, consequently, the harmonic and melodic relations and tendencies of the original Scale-tones and Chords are changed to conform to a new Tonic basis. No modulation is possible without such inflections, and although foreign tones may be introduced, as in the Altered and Mixed Chords, without entirely changing the Key, such Chords, as stated in 243 e, are really incipient Modulations, and are only prevented from effecting a complete change of Key, by vigorously maintaining the original Tonic impression.

263. **a.** All the 24 Keys in Music have exactly the same rotatory series of Letters — *A*, *B*, *C*, *D*, *E*, *F*, *G*, *A*, *B*, etc. — The difference between them is, that they ***start at different points*** in this series of Letters; and therefore, in order to preserve the fundamental arrangement of whole and half-steps (as shown in Ex. 6,) it is necessary to inflect certain of the Letters by Accidentals (♯, ♮, ♭). — For example, in the scale of ***C-Major***, which commences with the Letter *C*, there are (according to the universally adopted notation) no chromatic inflections, and the half-steps lie between ***E—F*** (steps 3—4) and ***B—C*** (steps 7—8), thus: $\overset{1}{C}—\overset{2}{D}—\overset{3}{E}–\overset{4}{F}—\overset{5}{G}—\overset{6}{A}—\overset{7}{B}–\overset{8}{C}$. — In a Major scale starting at *G*, the half-step ***B—C*** would be in the right place (steps 3—4), but the half-step ***E—F*** would lie between steps 6—7 instead of 7—8. To rectify this discrepancy the Letter ***F*** must be inflected **upward** (by the sign ♯): thus,

Scale *C*: $\overset{1}{C}—\overset{2}{D}—\overset{3}{E}–\overset{4}{F}—\overset{5}{G}—\overset{6}{A}—\overset{7}{B}–\overset{8}{C}—\overset{2}{D}$ etc. —

Scale *G*: $\overset{4}{C}—\overset{5}{D}—\overset{6}{E}—\overset{7}{F}\overset{8}{♯}–G—\overset{2}{A}—\overset{3}{B}–\overset{4}{C}—\overset{5}{D}$ etc. —

In the Major scale starting at ***F***, the half-step ***E—F*** is correct (steps 7—8), but the half-step ***B—C*** lies between steps 4—5 instead of 3—4; to rectify this discrepancy the Letter ***B*** must be inflected **downward** (by the sign ♭): thus,

Scale *C*: $\overset{1}{C}—\overset{2}{D}—\overset{3}{E}–\overset{4}{F}—\overset{5}{G}—\overset{6}{A}—\overset{7}{B}–\overset{8}{C}—\overset{2}{D}$ etc. —

Scale *F*: $\overset{5}{C}—\overset{6}{D}—\overset{7}{E}–\overset{8}{F}—\overset{2}{G}—\overset{3}{A}–\overset{4}{B}♭—\overset{5}{C}—\overset{6}{D}$ etc. —

Hence, the scale of *C*-Major is called the **Natural** scale; *G*-Major is called the scale of **One Sharp;** and *F*-Major the scale of **One Flat.** —

b. It appears then, that by introducing an *f*♯ into the Scale of *C*-Major (as substitute for and inflection of the Letter *f*), a transition may be effected from *C*-Major into *G*-Major. And, by substituting *b*♭ for *b*, a Modulation may be effected from *C* into *F*-Major; and so forth.

c. The origin of the **Minor** Key, and the relation of Minor to Major, which (as the similarity of Signatures proves) is only a distinction of *Mode* and not of *location* in the Modulatory system (Ex. 206), is explained in 82 (83, 84, 85), which see. — The **Major** mode (like the Major Triads) must be adopted as the basis of modulatory action and relation. The Minor mode is merely accessory to the Major. —

264. The first step in the study of Modulation is to acquire a thorough knowledge of the

Relationships between the Keys,

i. e. of their relative *locations* in the modulatory system. These points decide the practicability and quality of the various modulatory transitions (see 270).

a. The relationship of Key to Key agrees in many respects with the relations of the corresponding *Triads*. But in general it is more correct and convenient to define the degrees of relationship, firstly, and chiefly, *according to the number of tones which the Scales possess in common;* and secondly, according to certain important *coincidences*, or points of contact (of single tones or Chords).

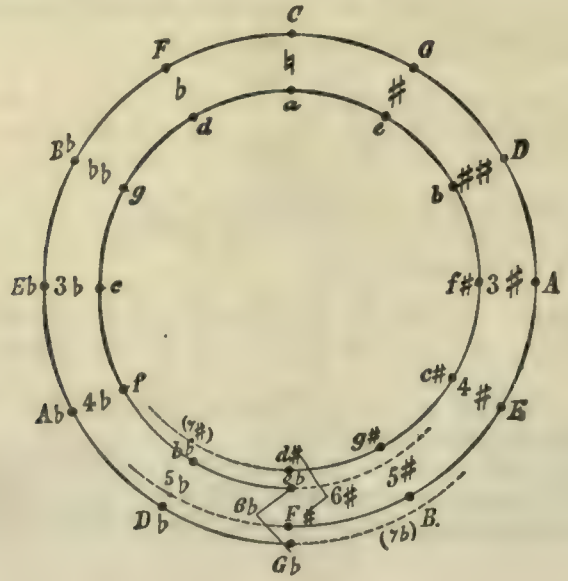
b. The notation of the Letters, and consequently the number of common tones, is indicated by the *Signatures* of the Scales (263 a); therefore the degree of similarity or Key-relationship becomes directly apparent by simply **comparing the Signatures.** This applies to, and includes, the Minor Modes as well as the Major.

c. The relative locations of the Keys (and their Signatures) are exhibited in the following chart of the modulatory System:

Explanations: The outer circle represents the Major Keys, the inner one their Relative Minors.—
N. B. **Hereafter the Major Key-notes will be printed in Capital letters, and the Minors in Small letters.**

The Signatures between the circles belong to both the Major and the Minor Keys. — The distance from Key to Key, along the circles, is a perfect fifth, or **Harmonic Degree.** That this is the interval-distance between adjacent Signatures is explained in 263 a, and proves that *Key-relations* are only magnified *Chord-*, or *Tone-relations.* — The difference in the size of the right and left half of the circle is owing to the *actual* difference between $f\sharp$ and $g\flat$, and is a trifle exaggerated, to make it more noticeable. This will be explained in Enharmonic Modulation. —

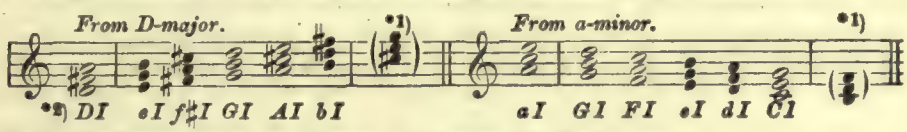
Ex. 206.



265. a. The Relationship of Key to Key is simply a question of *distance*, according to the above table, or "Circle", of Harmonic Degrees. It will be observed that each Key (Major and Minor) is attended or surrounded by five adjacent Keys. These are called the **Five Next-Related Keys**, and are *directly accessible.* — For instance, the five Next-related Keys of *C*-Major are. *G*, *e*, *a*, *d*, *F* (in any order). Of *A*-Major: *D*, *b*, *f*♯, *E*, *c*♯. — They can be found by reference to the table, or *by comparing the Signatures* (264 b.)

b. The 5 Next-related Keys of any given Scale are also definable as those whose *Tonic Triads* occur on the several steps of that Scale; (in Minor, the *descending Melodic* Scale). For illustration:

Ex. 207.



*1) Not the Tonic Triad of any Key! — *2) Comp. with Ex. 206. —

266. The Next-related Keys are designated as follows:

1stly, the *Dominant* Key;
2ndly, „ *Subdominant* „
3rdly, „ *Relative* „
4thly, „ *Relative of the Dominant* (Dominant-relative); and
5thly, „ „ „ „ *Subdominant* (Subdominant-relative). Thus

		From C:	From a:	
Dominant	**Key**	**G,**	**e,**	
Subdominant	„	**F,**	**d,**	
Relative	„	**a,**	**C,**	*1)
Dominant-relative	„	**e,**	**G,**	
Subdominant-relative	„	**d.**	**F.**	

*1) The Signatures of the 5 Next-related Keys do not differ from that of the Principal Key by more than *one* Accidental. The Relative Key has the *same* Signature as the Principal Key; the Dominant (and Dom.-rel.) have one sharp more or one flat less; and the Subdom. (and its Relative) have one sharp less, or one flat more. 264 b.—

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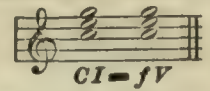
267. Besides these five Keys, there are a few others which, on account of certain important harmonic or melodic *coincidences* with the principal Scale, can claim a remote degree of connection with the latter, and can be reached more readily than the other Foreign Keys. They may be called **Remotely-related** Keys, and are as follows:

1stly, the *Subdominant-Minor* from *Major*, and, reversed, the *Dominant-Major* from *Minor;* for example *C*-Maj. and *f*-*Minor* (instead of *F*-Major); or *f*—*C*, etc. — This relationship, although "Remote", because there is a difference of 4 Accidentals in the Signatures (comp. *C* and *f*· ♮ and 4 flats), is *quite as intimate as any Next-related Key*, and the Modulation from one Key to the other is as easy and natural as if they were actually next-related. For this transition the term "Stride" may be adopted. The following formula is easily memorized·

The Stride is a Harmonic Degree, *downward* from the *Major* Key-note, and *upward* from the *Minor*, and with a *change of Mode.*

Thus: *G*—*e* (and, of course, *e*—*G*); *d*—*A*; *a*—*E*; *F*—*b*♭ (not *b*♯! The Harm. Degree is a *perfect* fifth!); *b*—*F*♯; *g*♯—*E*♭ (with necessary change from sharps to flats); *A*♭—*e*♯, etc. etc. —

The Stride-relation is based upon the coincidence of the I of Major with the V of the Minor Key, — the two most important Triads. Thus 

268. 2ndly, the **Opposite Mode** of the same Tonic. For example, *C*—*c*, *a*—*A*, *g*♯—*A*♭, etc. etc. — This relation is based upon the coincidence of all the important Scale-tones (Tonic, Dominant, Leading-tone, etc.), and is a very common Modulation, though more difficult than the Stride. The relation is "Remote", because there is a difference of three Accidentals in the Signatures.

269. 3rdly, those Keys in which there is a coincidence of the **Mediant and Tonic** notes (*Inactive* tones) possess a mutual relationship, which, though more concealed than the other modulatory links, is very significant and useful. For instance: *C* (Tonic-note *e*) and *A*♭ (Mediant-note also *e*); or *C* (Mediant *e*) and *E* (Tonic *e*). Between *Major and Minor* Keys this relationship is *close*; between *Major* Modes it is *Remote*. Thus:

Ex. 208.

These are called the Mediant-Modulations, and can be made quite easily, *upon certain conditions.* —

There are a few other Remote relationships, in which, as above, the Keys have some single significant point of contact; but they are not of sufficient importance to demand specification. See later. — Keys which are neither Next-related nor Remotely-related, are termed "Foreign". —

First Rule of Modulation.

270. A Modulation may be made *directly* into any of the *5 Next-related Keys;* and also by the "*Stride*". — Into the *Remotely-related* "Opposite Mode" and "Mediant Keys", a Modulation may be made *directly*, but only upon certain conditions. — The *Foreign* Keys can, as a rule, only be reached *indirectly*, through the intermediate Related Keys. —

Exercise thirty-seven.

Make a table of the Related Keys (Near and Remote) of every Major and Minor Key, according to the following model. Ex. 206 is *not* to be referred to until the table is finished!

Prin. Key	*Next-Related Keys:*					*Remotely-Related Keys:*			
	Dom.	Subdom.	Rel.	Dom. Rel.	S-D. Rel.	Stride	Opp. Mode	Ton.-Med.	Med.-Ton.
C (Maj.)	*G*	*F*	*a*	*e*	*d*	*f*	*c*	*A*♭	*E*
a (Min.)	*g*	*f*	*E*♭	*B*♭	*A*♭	*G*	*C*	—*1)	—*1)
G	*D*	*C*	*e* etc.						
g	*d*	*c*	*B*♭ etc.						

*1) The Mediant Keys from *Minor* are *Next*-Related: Ex. 208.

Fundamental principles.

Modulations are made by inflecting certain Letters by means of Accidentals.

All the Keys have the same series of Letters, but with different signs.

The degree of Relationship between two Keys depends upon the *number* of Tones, or the *quality* of the Tones, which they possess in common.

The Signatures, which indicate the condition of the Letters, define the degree of Relationship.

The five Next-related Keys differ from their Prin. Key by, at most, one sign.

The "Stride" (a harmonic Degree downward from Major and upward from Minor, with change of Mode) is tantamount to the Next-related Modulations.

Next-related Keys may be reached *directly*; Remotely-related Keys, *conditionally*; Foreign Keys, *indirectly*.

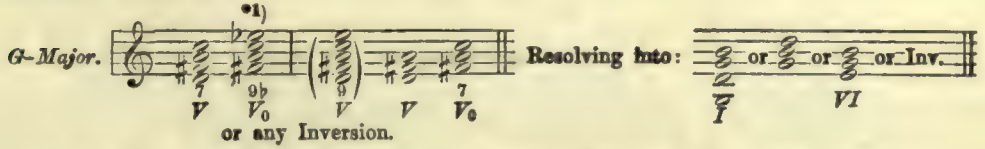
Section 2nd. The process of Modulation.

271. The transition from one Key into another can only be effected, legitimately, ***through the* Leading-tone** ***of the desired Key***; or, in other words, through those Chords which contain the Leading-tone. Because, as shown in 8 b, this is the *characteristic* tone of a scale, and the one which ***must*** progress more or less directly into its Tonic-note and Chord.

272. The Leading-tone occurs in all the **Dominant** Chords (First-class Concords and Discords), and it is through these that the desired Key must be entered. The best among them for this purpose are: **the** $\overset{7}{V}$ (which is almost absolutely characteristic of its Scale), and **the Chord of the Diminished Seventh** ($\overset{9}{V}_0$); which, as stated in 205, can be used equally well in Major, as Altered chord (Ex. 186, note *3)), and in Minor, as Legitimate Chord; and which is distinguished not only for its beauty, but also for its flexibility, and the ease with which it connects with other Chords.

The Modulation **into** *G*-major, for example, would be made through any of the following modulatory Chords:

Ex. 209.



*1) The $\overset{9}{V}_0$ may, of course, be used with the *Major* Ninth, but it is much more difficult to handle. (See 199).

These very same modulatory Chords would also be used in entering *g-minor* (as well as *G*-major). Because, as is obvious, the modulatory act is directed toward the *Tonic*, or *Key-note*, which is the same in both modes.

273. This important rule is illustrated in the following Modulations from *C*-Major into *G*-Major (the Dom. Key; 266);

Ex. 210.

The sign × indicates where the entrance into the new Key (the "Modulation") is effected.

274. **a.** Modulations that are made, in the above manner, with a **First-Class** Chord, are the most direct and positive.

b. But it is also possible to enter the desired Key through one of its **Second-Class** Chords (II — IV — $\overset{7}{\text{II}}$; 220), in which case the Modulation will be somewhat less abrupt, and still (as 2nd-Class Chords resolve directly into those of the Dominant) it will be scarcely less reliable than the former.

c. Of the remaining Class of Chords, *i. e.* the **Tonic** Class (see 220), only one single form can be used in effecting a Modulation; namely: **the I_2** (Tonic-$\frac{6}{4}$ Chord) of the desired Key, upon an accented beat.

It is entirely contrary to the fundamental principle of Modulation, to enter a new Key with one of its *Tonic* Chords, but the ***accented*** I_2 is a very important exception. By virtue of its intimate relation to the Dom. Triad, and its obligatory Resolution into the latter (154 c), it establishes its Key completely.

These more gradual transitions are illustrated in the following Modulations from *C*-Major:

Ex. 211.

*1) The new Key is *indicated* by a 2nd-class Chord; but it is evident that the Modulation is not *complete* until the Dominant Chord, with the *Leading-tone*, appears (271). — *2) The I_2 must stand on an accented beat, otherwise it has no modulatory power. — *3) The Examples, hereafter, will be in consecutive Phrase- (or Period-) form· not in separate "measures", as heretofore.

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275. The act of modulation consists mainly in *obtaining* the desired Key, it is true; but it is also important to decide at what point, and *upon what Chord, the original Key may best be left.*

a. If the last Chord of the original Key is one which also belongs to the prospective Key (in another harmonic signification, of course), the Modulation will be gradual· there cannot possibly be any *Chromatic* progressions: and the Chord, being common to both Keys, is reasonably certain to connect readily with the following modulatory Chord. For instance:

Ex. 212.

*1) This Chord, the last one in *C*-Major (as VI), may also be defined, prospectively, as the II of *G*. Consequently, the progression into the following characteristic (Dominant) Chord of *G* is as simple and natural as if no change of Key were taking place.

Such Modulations are called **Diatonic**, because, in the absence of any chromatic change, each separate Chord-progression (before, during, and after the change of Key) obviously *pursues the track of a diatonic Scale.*

*2) Here, on the contrary, the last Chord in *C* (the II_4) does *not* belong to the next Key (*G*-major), and therefore the chromatic change of *f* into *f*♯ is necessary.

Such Modulations are called **Chromatic.** They are more abrupt and striking, and consequently more effective, than Diatonic transitions.

*3) Not only this last Chord, but also the two or three preceding Chords, belong to *both* Keys. The change of Key, in such cases, is made almost insensibly.

276. a. The simplest, most general and most important rule, however, is, *that it is always best to leave a Key at one of its* **Tonic Chords** *(either I or VI)*; simply because these **Inactive Harmonies**, *especially when they occupy accented beats*, convey the impression of completion and fulfilment, and rather suggest than hinder the digression into a new harmonic circle; comp. Ex. 10, and paragraphs 52, 54 c, 220 c, and 221 No. 19.

For illustrations of this rule, see Ex. 210, Ex. 211 (all excepting No. 4), and Ex. 212 No. 1, in all of which cases the ***last Chord of the first Key*** is either the I, I_1 or VI, (though not invariably on an accented beat).

b. If the Tonic Chords at the close of the first Key belong also to the desired Key, their progression into the Modulatory Chords of the new Key will be *Diatonic* (as in 275 a); otherwise the progression will be *Chromatic*. For the treatment of the latter see 246 e, and 294.

The following Periods illustrate these principles of Modulation, both Diatonic and Chromatic:

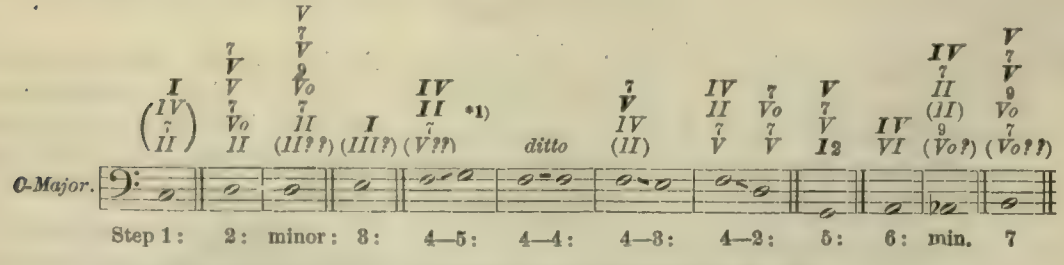
Ex. 213.

Mendelssohn.

*1) The last Chord of the old Key is, in every case excepting *3), a *Tonic* Chord (276 a). And, as it invariably belongs to the following Key also (275 a), the modulatory progression is *Diatonic*. — *2) 274 c. — *3) The last Chord of the old Key, (in this instance $A\flat$), is not the I but the V. This is chiefly owing to the *unaccented beat*; it is the *preceding* Chord, upon the *accented* beat, which appears to conclude the former Key, and this *is* the Tonic Chord of that Key. — *4) This is the I of the first Key, but, not belonging to the next Key, the chromatic succession c — $c\sharp$ is necessary. — *5) 274 b. —

Harmonizing of Unfigured Basses.

277. The harmonizing of an unfigured Bass does not differ materially from that of a given Soprano (as in Part II, Division C). The most important aim is **to obtain a melodious Soprano.** The following table indicates the treatment of each Scale-step in Bass:



*1) See also 178 and Ex. 181. And compare the whole table with Ex. 184.

Exercise thirty-eight.

A. Play the following Chord-progressions on the Piano, in the usual manner (the ***Bass alone*** in the left hand):

C I — F $\overset{7}{V_1}$ — I ‖ C I — G V — I ‖ C I — a $\overset{7}{V}$ — I ‖ C I — e $\overset{7}{II_1}$ — V — I ‖

C $\overset{3}{I}$ — $\overset{7}{V}$ — VI — d $\overset{9}{V_0}$ — I ‖ G I — C $\overset{7}{V_3}$ — I_1 — G $\overset{7}{V}$ — I ‖ a $\overset{3}{I}$ — $\overset{7}{V_1}$ — I | e I_2 — IV_1 — V | I ‖

F I — IV_1 — I_2 — d $\overset{9}{V_0}$ — I — g $\overset{7}{V_0}$ — I ‖ b $\overset{8}{I}$ — V — I — A $\overset{7}{II_3}$ — $\overset{7}{V_1}$ — I ‖

B. Modulations into **Next-related** Keys. Each Bass, after being worked out, is to be analyzed, as usual: the Keys, their Relationship, the modulatory Chord, and the species of Modulation (diatonic or chromatic) must be marked. — **Do not overlook or neglect the Accidentals!** The Accidentals make the Modulation — see 263 a.

*1) Ex. 107, note *1). — *2) Exercise 35, note *2), and notes *1) and *3) also. — *3) See 246 e. —

*4) The Melody-note is sustained. — *5) For the treatment of these Unfigured Basses, see 277 *and 316 b.* A modulation takes place at each *. As a preliminary exercise, the student is recommended to harmonize Melodies b, e, and g of Exercise 32 B, *as Bass part* (one or two octaves lower), altering, if necessary, the first note to a Tonic, and the note before the last to a Dominant. — *6) Here, and in all subsequent Lessons, the pupil should also make a number of **Original Basses** (with upper parts), applying the material of the Lesson, and imitating the given Basses. *But they must never exceed a 4-Measure Phrase!*

Fundamental principles.

Modulations are made most naturally through the *Leading-tone* of the desired Key.

Consequently, the best Modulatory Chords are those of the First Class (Dominant).

Second-Class Chords, or the *accented* I_2, may precede the Dominant Chords of the new Key, in more gradual Modulations.

The best point at which to leave a Key is where one of its *Tonic* Chords (I or VI) occurs. Especially at an Accent.

Diatonic Modulations are smoother, but less striking, than the Chromatic.

Altered Chords, as Modulatory Mediums.

278. It is evident that the Altered Chords, standing as they do upon the boundary line between different Keys, must constitute a very natural and efficient medium between the Keys to which they *actually* belong (as *Altered* Chords), and the Key or Keys which they *appear* to represent (as *Legitimate* Chords). The distinction is defined in 243 d, to which the Scholar is again referred. — This interesting phase of modulatory transition is illustrated in the following Examples:

Ex. 214.

*1) This Altered Chord (the raised 2nd and 4th steps: 247 c) is purposely used three times in succession; twice as Altered Chord in *C*, before it is transformed at ≍ into the Legitimate $\overset{9}{V}_0$ of *e*-minor. This is done to prove its identity as Altered Chord of *C*, in comparison with its subsequent signification in *e*. — *2) It is true that this Example (and the following one also) might be demonstrated exactly according to the preceding lesson, without considering the Altered Chord. Because an Altered Chord, when it progresses in this way, *ceases to be "Altered"*. Still, the fact remains, that the transitional Chord at ≍ *might* be (and, in truth, actually *was*) an Altered Chord in the preceding Key, wherefore the Key-relations are more palpable, and the Modulation more natural, than if this were not the case. The succeeding Examples (Nos. 3 to 10) cannot be accounted for in any other, or simpler, way. — *3) Lowered 2nd step: 255. — *4 Here, the transitional Chord enters as Legitimate V of the original Key, but progresses as Altered IV (with raised 6th step: 251) of the next. — *5) and *6) Lowered 2nd step. — *7) This is exactly (and purposely) the reverse of No. 1; and, as there, the Altered Chord is used first as actual $\overset{9}{V}_0$ of *e*, before being transformed at ≍ into the Altered II of *C*. It is plain that this modulatory Chord (at ≍) cannot be analyzed in any other way than as an *Altered Second-class Chord* of the desired Key: Compare note *2). — *8) The transitional Chord is *Mixed*, in both Keys. — *9) A raised 4th step in *C*, and a raised 6th step in *a*. — *10) Raised 2nd and 4th steps in *C*, and raised Tonic and 6th steps in *F*: 248 c.

Extraneous Modulations.

(1. Through Next-related Keys.)

279. A Modulation is called extraneous when it extends ***past the Next-related Keys***; or, in other words, into a Key whose Signature differs by more than one Accidental from that of the abandoned Key.

The *fundamental* rule for such remote Modulations is to progress in *successive stages*, *through the intermediate (Next-related) Key or Keys*, *along the lines of the "Circle of Keys"* (Ex. 206): that is, through the *Signatures* which occur successively in the direction of the ultimate Key.

For instance, the Modulation from *G*-Major (1 sharp) into *A*-Major (3 sharps) would be made through the Key of 2 sharps, thus: $G - \underset{*1)}{D} - A$, or $G - \underset{*2)}{b} - A$.

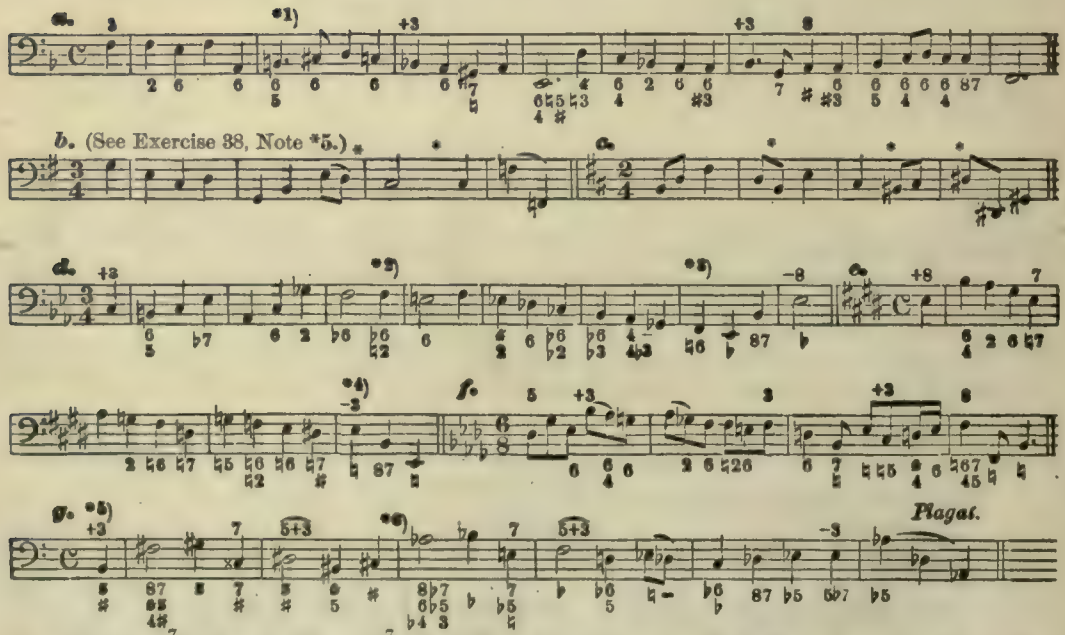
*1) It is not necessary to adhere to the same *Mode:* on the contrary, it is advisable to alternate (more or less regularly) between Major and Minor, as at *2).

From *C* (natural scale) into $A\flat$ (4 flats), through 1, 2 and 3 flats, thus: $C - F - B\flat - E\flat - A\flat$: or $C - d - B\flat - e - A\flat$ (Ex. 215—2): or $C - F - g - E\flat - A\flat$, etc.

And from *E* (4 sharps) into $b\flat$ (5 flats), through $5\sharp$, $\overbrace{6\sharp \text{ or } 6\flat}$, thus: $E - B - \overbrace{F\sharp \text{ or } G\flat} - b\flat$: or $E - g\sharp - \overbrace{F\sharp \text{ or } G\flat} - b\flat$, etc. — For illustration:

Ex. 215.

Exercise thirty-nine.



*1) Altered II of *F* and Altered IV of *d*. All the Modulations in this Bass are made through Altered Chords, and must be analyzed accordingly (278). — *2) During the first three meas. this Bass modulates in regular Degrees "downward", *i. e.* adding a new flat each time: At *2), instead of keeping on into 6 flats, it *turns back* into 4 flats, and then resumes the original downward direction. This is done to avoid

the monotony of several successive Modulations in the same direction. — At *3) the monotony is again broken by the "horizontal" Modulation into the Parallel Key. — *4) Compare note *2). — *5) The Signature (5♯) is omitted, on account of the subsequent Mod. into the flat Keys. — *6) Here the *Notation* is changed from 7♯ to 5♭; the *Key* is the same. — Add Short Original Basses. —

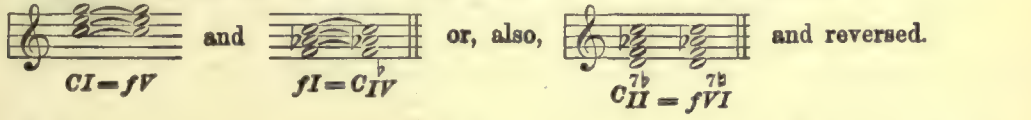
Extraneous Modulations.

(2. Direct.)

280. There are cases in which, contrary to the above fundamental rule of extraneous Modulation (through intermediate Keys), the Remote Key is reached *directly*. The most common of these exceptions are the Keys which are **Remotely-related,** namely, the ***Strides***, the *Opposite Modes*, and the *Mediant Keys*.

The Stride.

281. See 267. This transition is generally made in the ordinary way, leaving the first Key at its *Tonic Chord* (the I, but *not* the VI, in this case), which is at the same time invariably a Principal Triad of the desired Key. Thus, in the Stride *C—f*, for instance

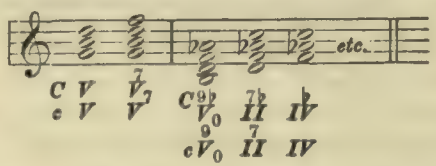


Ex. 216.

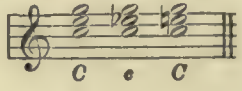
***1) An Altered Chord (lowered 6th step of *C*). — *2) The facility of the Stride is strikingly shown in this Example, where it is made forward and backward in three beats! Such rapid Modulations, from beat to beat, will be specially considered, a little later on. When, as here, the I of the old Key is *at the same time* the Dominant Chord of the new one, there is no need of delaying the Modulation. — *3) In this unique and exceptional example of the Stride, the order of Chords is reversed; *i. e.* the first Key is abandoned at its V, and the new Key is entered through the I. —**

The Opposite Mode.

282. a. See 268. This change (not to be confounded with the *Relative* Key — 82 c) is generally made *through the Dominant Chords*, which are common to both Modes. The Altered Chords with lowered 6th step (in Major) are also available, and extremely auspicious. Thus:



Or, the Modulation may be made by a direct *chromatic* change from the one Tonic Triad to the other. Thus:



b. This Modulation is very different from the Stride, and is far from being as natural and easy as the latter. It is of a peculiar character, and is not everywhere appropriate. The change from Minor into Major is often employed at the *end* of Minor Pieces, in order to obtain a stronger Perf. Cadence (on the *Major* Tonic); see **Bach**, "Well tempered Clavichord", Prelude and Fugue Nos. 2, 4, 6, etc., the last measure of each. — It is also frequently used, either way, for the sake of abrupt and striking contrasts; and, more rarely, as a means of reaching other remote Keys more quickly (Ex. 217—3). —

c. When the *Dominant* Chords are used for the Mod. into the Opposite Mode, they should appear on accented beats, and be *prolonged* as far as the rhythm will permit, so as to separate the conflicting Mediants (Maj. and Min.) as widely as possible.

Ex. 217a.

Liszt.

*1) As this Chord is common to both Modes, it is simply a question whether the Mediant (the distinctive Letter — in this case *d*) shall be *Major* or *Minor* in the following Chord: Compare Ex. 18 i, notes *1) *2). — *2) Here the Opp. Mode is obtained *chromatically*. — *3) The Stride. — *4) Here, the Opp. Mode serves to shorten the distance between *D* and *B♭*, which, according to 279, would require the intermediate Keys *G*, *C* and *F* (or their Relatives). — *5) IV of *a*-Minor, and Altered IV of *A*-Major. — See also Ex. 221—1. —

283. The exchange of Mode, indicated at note *1) above, is liable to take place after **any** *Dominant Chord*, at **any** point in the Phrase. The coincidence of the Dom. Class of Chords in both Modes is often turned to advantage in this way, for many reasons. For example:

Ex. 217 b.

Beethoven. *Op. 73.*

*1) The modulatory outline of this Example: E—e—G—F—E♭, would be utterly incorrect, were it not for the ingenious manner in which the ambiguity of the $\overset{7}{V}$ is utilized, in substituting the Minor Key for the expected Major, thus:

$$E\ {}^{7}_{V} - \left.\begin{matrix}E\\e\end{matrix}\right\} - G\ {}^{7}_{V} - \left.\begin{matrix}G\\g\end{matrix}\right\} - F\ {}^{7}_{V} - \left.\begin{matrix}F\\f\end{matrix}\right\} - E\flat. -$$

*2) The *Major* Mediant *c♯* is substituted for *c♮*, on account of *d*-Minor. — See also: **Schubert,** "Schöne Müllerin" (Vocal, Op. 25), No. 17, in which there is a continual exchange of Mode throughout the Song, in striking adaptation to the character of the words. See measures 2—3, 4—5, 18, 21—22, 31, 36—38, 40—41, 45—46, etc. —

The direct Extraneous Modulations into the **Mediant** Keys are subject to special conditions, which will be considered later (287). —

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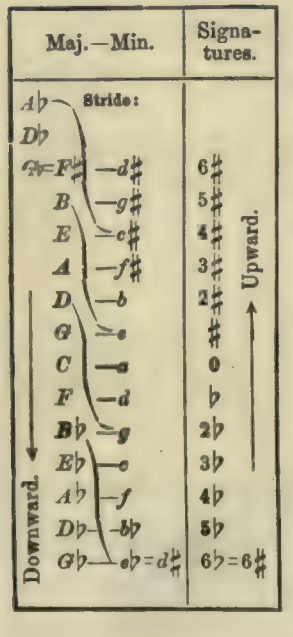
284 As the Stride is almost exactly equivalent to a Next-related Modulation, it is evident that its application as *intermediate Key*, in Extraneous Modulations, conforms sufficiently to the fundamental rule given in 279. Its use in this capacity is very advantageous, because it shortens extreme distances materially (being a transition of 4 Signatures), and relieves the monotony of regularly succeeding Signatures.

For instance, instead of the long-winded and monotonous successions: *C—F—B♭—E♭—A♭—D♭—G♭*, the same end may be reached thus: *C—f—D♭—G♭*; or: *C—F—b♭—G♭*. (The — indicates the Stride). Also, from *C* to *F♯*, thus *C—e—B—F♯*. — From *D* to *F*, thus: *D—g—F* (Ex. 218—2). — From *C* to *A*, thus: *C—a—E—A*, (*past* the desired Key, and back); or: *C—d—A* (Ex. 218—1). —

Ex. 218.

*1) *F♯* in the Tenor (as lowered 6th step of *A*) would prolong the impression of the former Key (*d*) and make the Mod. smoother. —



In determining the route to be taken in an Extraneous Modulation, it is first necessary to ascertain the *distance* and the *direction*, according to the table on the margin. For instance: from *A♭* to *b* is *six* degrees *upward*. If, as here, the distance exceeds *three* degrees, it is advisable to shorten the Modulation by using the Stride; but otherwise it is not necessary, and the route may be taken, as usual, through successive Signatures. In a remote Mod. *upward* from a *Major* Key, the Stride can not be employed directly, for obvious reasons (— the Stride is *downwards* from Major); therefore a transition must first be made into a Next-related *Minor* Key, from which the upward Stride will be possible. The same applies inversely to a remote Mod. *downward* from a *Minor* Key. For example: from *C* to *g♯*, thus: *C—e—B—g♯*; or *C—a—E—g♯*. — From *f♯* to *B♭*, thus: *f♯—D—g—B♭*; or *f♯—A—d—B♭*.

Exercise forty.

A. Indicate, in *Letters* (as shown above) the ***shortest possible route*** which may be taken in effecting the following Extraneous Modulations. (***Occasional*** reference to Ex. 206, and to the table on the margin, is not deprecated. **Only the Stride**, not the Opp. Mode., is to be used in shortening the distance!)

From *C* to *E♭*:	From *d* to *A♭*:	From *E* to *g*:	From *f♯* to *E♭*:	From *A♭* to *G*:
„ *c* „ *F*:	„ *D* „ *E♭*:	„ *E* „ *D♭*:*1)	„ *G♭* „ *F*:	„ *A* „ *e*:
„ *C♯* „ *g♯*	„ *D* „ *g♯*:	„ *e* „ *F♯*:	„ *G♭* „ *e♯*:*1)	„ *e* „ *B*:
„ *e♯* „ *D*	„ *e♭* „ *c*.	„ *e* „ *f*:	„ *G* „ *g*: *2)	„ *B♭* „ *E*:
„ *e♯* „ *F♯*:	„ *e♭* „ *F♯*:*1)	„ *F* „ *E*:	„ *G* „ *D♭*:	„ *b♭* „ *B♭*:
„ *D♭* „ *g*:	„ *E♭* „ *d*:	„ *F* „ *G♭*:	„ *g♯* „ *b*:	„ *B* „ *f*:*3)
„ *d* „ *A*:	„ *E♭* „ *C♭*:	„ *f* „ *b*:	„ *g♯* „ *a*:	„ *b* „ *E♭*:
		„ *F♯* „ *e*:	„ *g* „ *D*:	„ *B* „ *C*. —

*1) It must be remembered that 6♭ and 6♯ are identical. —
*2) *Not directly;* the Opposite Mode is *not* to be used here. —

B. **Basses: To be worked out, and analyzed as usual. The Positions may be ignored.**

*1) *C♯*-Major is substituted for *c♯*-Minor. — *2) Similar to note *1), *c* for *C*, and *F* for *f*. — *3) IV of *d♯*, Mixed. — *4) See Exercise 38, Note *5). — *Add Short Original Basses.* —

Fundamental principles.

Remote Keys are reached, as a general rule, through the intermediate Next-related Keys. — The only Remote Keys which can be reached *directly*, by ordinary and legitimate means, are the "Stride" and the Opp. Mode. —

Both the "Stride" and the Opp. Mode are employed in shortening the distance to a remote Key; *especially* the Stride. —

Modulation in Sequences, and at Cadences.

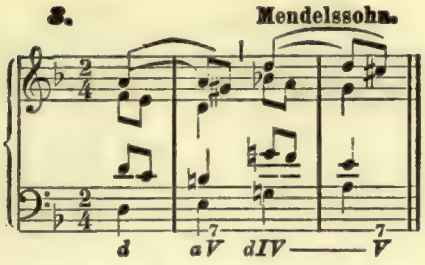
285. a. The reason assigned in 276 a for leaving a Key at its *Tonic* Chords was, that the latter fulfil the melodic and harmonic obligations of their Key, and therefore leave no obstacle in the way of an exchange of basis. And, analogously, preference is given to *Accented* beats, because these are *inactive*, constituting the points of rest (more or less pronounced), upon which, as was seen in 62 and 113, all Cadences, ultimate and transient, must be made.

b. Nowhere is this impression of completion stronger than at the *Cadences*, and at those places in the course of a Phrase where a more or less distinct interruption of the Rhythm (perhaps only a momentary pause) marks the end of a separate section of the form, — at the "joints" (so to speak) between the various Members, Motives and Figures, of which the Melody consists: (those points at which, in playing, the finger is raised, or, in singing, breath may be taken). — Hence it is, that Modulations are very frequently made at these points; and it is so natural to begin a new Melodic Member with a new Key, that these transitions are often very abrupt, and, especially when extraneous, are made without regard to the ordinary and legitimate rules of Modulation.

286. According to this principle, Modulations may be made in Sequences; *i. e.*, as repetition of a melodic or harmonic series of tones or Chords a certain interval higher or lower (See 13 b). The original Member and its Sequence are, of course, separated by a "joint", and their symmetry is an additional justification of the change of Key. The Modulation *may* (not *must*) be made from the last Chord of the first Key (whether it is a Tonic Chord or not) *directly into the I of the next Key*, without strict regard to its connection with the former, and without the intermediation of the Leading-tone, which is so indispensable in ordinary Modulations.

Compare 274 c. — Such an abrupt change of Key may more aptly be termed a modulatory Leap, than a genuine "Modulation". —

Ex. 219.



*1) and *2). These Modulations are both extraneous, and *not remotely related*. Such an unusual transition would hardly be effected anywhere but at a melodic "joint", and in a Sequence. — *3) The 3rd group is not an exact Sequence of the foregoing, nor is this absolutely necessary. General similarity of melodic progression, or a *partial* Sequence (in only one or two parts) is all that the ear demands. — See also Ex. 221—4. — There is an analogy between these Examples and Ex. 88, note *2). —

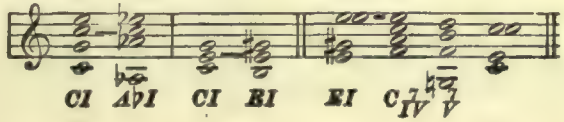
The Mediant-Modulations.

287. It is at such points as these in the course of a Period, and, particularly, at *actual Cadences* (Perfect and Imperfect) that the Mediant-Modulations, and other kindred transitions of a peculiar nature, can be made with ease.

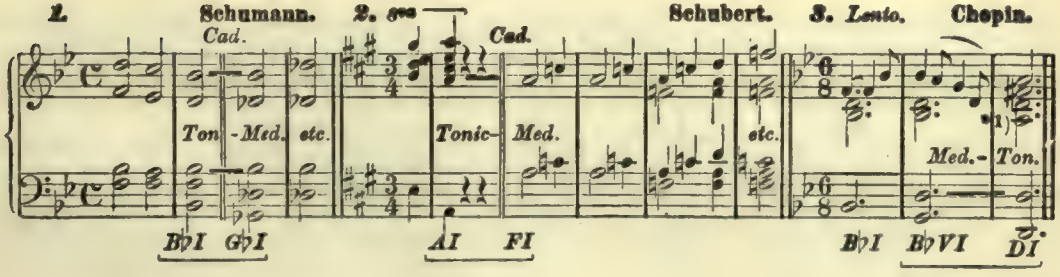
288. a. The Remote-relationships called the "Mediant Keys" in 269 (which see), are based upon the coincidence of the *Tonic* note of either (Major) Key, with the *Mediant* note of the other (Major) Key; and therefore the transition will only be justifiable, strictly speaking, *when it is made precisely at this point of contact*, by transforming either the Tonic or Mediant note of the first Major Key into the Mediant or Tonic of the other, inversely.

b. As these tones both belong to the Tonic Chords, it is necessary to make the Cadence *upon the I* of the first Key (very rarely, the VI), and progress, as intimated in 286, *directly into the I* (more rarely into the IV) of the next.

c. The connecting-tone usually remains in the same part. Thus



Ex. 220.



*1) This interesting example of the Med.-Tonic Modulation is not made at a Cadence, but in the uninterrupted course of the Phrase. This is possible, but rare. —

Other Cadence-Modulations.

289. **a.** The Cadences or "joints" in a Phrase or Period are such exceptionally auspicious moments for modulatory changes, that still other Remote Keys, whether related (in the ordinary sense) or not, can be directly obtained with comparative facility and good effect, at these places. It is simply necessary, or at least desirable, to maintain some single (but significant and palpable) connecting link, as shown above.

b. Thus, the **Dominant** note may be exchanged for a Mediant, or reversed; and it is quite common to transform either of the three Inactive tones of the first Scale (Tonic, Mediant or Dominant) into an Active tone (7^{th}, 6^{th} or 4^{th} step) and resolve it accordingly. The most usual of these last forms is:

c. to transform the **Tonic** note (in the I) into a **Leading-tone** (in the V or III). For example:

Ex. 221.

*1) Opp. Mode; *i. e.* the Major Tonic is exchanged for the Minor one, at the Cadence. — *2) The Mediant is exchanged for a *Dominant* (instead of a Tonic, as in Ex. 220—3). The new Key (*d-Minor*) is Next-related to the former one; but it might *just as well* be the remote Key, *D-Major*. — *3) Also an exchange of Dom. and Med., and an Extraneous Modulation. — 4*) The Altered IV (lowered 6th step). — *5) At this Pause, which interrupts the Rhythm as completely as if it were a Cadence, the Tonic note of the first Key is transformed into a Leading-tone. — *6 Here, also, the Tonic *d* becomes the Leading-tone *c*♯. — *7) The Dominant of the first Key is transformed into a 6th step, — in the *course* of the Phrase, (owing perhaps to the slow Tempo). —

Exercise forty-one.

Modulations in Sequences and at Cadences, into Related and Remote Keys. To be worked out and analyzed as usual. The Positions may be ignored.

*1) Sequences should be made as nearly alike as is practicable. Comp. Ex. 219, Note *3). — *2) See Exercise 38, Note *5). — **Add Short Original Basses.** —

Fundamental principles.

Modulations are most easily effected at those points where separate Members of the Melody join; *i. e.* where interruptions of the Rhythm, or actual Cadences, mark the end of a Section of the Form. —

Modulations are therefore often thus made in *Sequences*, without strict regard to the Key-relations, and the legitimate means of transition. —

At Cadences, the Mediant Modulations and other Extraneous transitions may be made through single-tone transformations. —

The Inactive tones may be mutually exchanged; or they may be transformed into Active tones. —

Section 3rd. Chromatic Progression, as a special modulatory agent.

290. a. A progression is chromatic when the *same letter* is inflected upward or downward by an Accidental, thus: g—$g\sharp$, or g—$g\flat$, and reversed.

b. The result of such an inflection is much greater than it appears to be, and can only be correctly appreciated by comparing the two tones as Key-notes, which, according to Ex. 206, indicate their actual distance apart, in harmonic degrees (perf. 5ths). This test proves that every chromatic progression is *actually* a *leap of* seven degrees; thus G ($1\sharp$) and $G\flat$ (6 flats); or $A\flat$ (4 flats) and $A\sharp$ (3 sharps).

291. Hence, it is evident that Chromatic Chord-progressions must be classed among the most peculiar and unnatural*1) movements in Harmony; and many unique harmonic successions, which cannot be explained according to ordinary and natural musical principles, must be ascribed to the subtle and seductive agency of "Chromatics". The change (for which there can hardly be any *theoretical* justification) must be accounted for and excused on purely *practical* grounds, namely: the *apparent* distance (*i. e.* to the ear) is so short, being but a half-step, that the ear, far from experiencing any difficulty, rather evinces an *inclination* to follow and apprehend the progression. —

*1) The terms "Chromatic" and "Diatonic" are directly opposed to each other, and as Diatonic series conform to the arrangement of tones in the *Natural* Scale (Ex. 25), it follows that Chromatics are "*Unnatural*".

292. Abundant opportunity has been afforded, in the foregoing examples, of observing the *ordinary* use and application of Chromatic progression, because there was no sufficiently important reason for adhering exclusively to *Diatonic* successions: see 246d; Ex. 212b; 276b; Ex. 213, No. 2; and Exercises 38, 39, 40. But, as intimated above, there are certain *special* uses for Chromatics, and certain peculiar harmonic effects which can only be produced and demonstrated by chromatic means.

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293. Chromatic Chord-progressions (that is, Chord-progressions in which one or more of the parts progresses chromatically) may be distinguished as *Simple* or *Compound*.

In a *Simple* chrom. Chord-progression the Chord does not change its *form*. In Compound progressions there are diatonic as well as chromatic successions, so that the Chord assumes a new shape. For illustration:

Ex. 222.

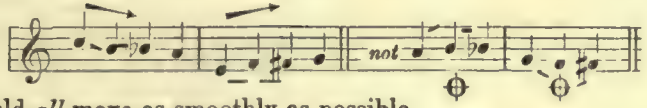
*1) The simple change of *e* into *e♭* does not alter the *form* of the Chord, which is the Triad *c—e—g before and after* the chrom. change. — *2) Simultaneously with the chrom. change *e—e♭* in Soprano, there is a diatonic progression *e—b♭* in Bass, whereby the Chord-form is changed from a Triad to a Ch. of the Second. —

Rules of Chromatic progression.

294. **a.** The chrom. succession must be made *in one and the same part.* (246 e).

b. If the note which is about to be chromatically changed happens to be *doubled*, it should progress, in the one part, *diatonically opposite* to the chrom. progression in the other part.

c. The chrom. progression should be *approached*, if possible, in the *same direction.* Thus:



d. The parts should *all* move as smoothly as possible.

295. The violation of 294 a (*i. e.* when the original note is in one part and its chrom. change in another) occasions the so-called **Cross-relation.** But, though false in principle, there are many exceptions, and many excuses for its occurrence. For instance; (*a*) when one of the parts involved is the *Bass*; (*b*) when the original note (the one to be chrom. changed) *progresses diatonically*; (*c*) when *separated by a Sequence*, or any other joint in the Phrase, (*d*) when in different parts but in the *same register*. For illustration:

Ex. 223.

*1) These two examples, in which the chrom. change is divided between two separate parts, are entirely wrong. — *2) Admissible, because the Bass part, in which the Cross-relation occurs, is, to a certain extent, *independent* of the 3 upper parts. — *3) The examples at (b) are all allowed, because the *original* tone moves *diatonically*.— *4) Sequences. Compare Exercise 19, note *3). — *5) When the chrom. change takes place in the *same register*, the ear will not detect a Cross-relation. But this licence must be limited strictly to Instrumental music. See also Ex. 214—6. — *6) These Cross-relations all occur on the *same beat* of three successive measures, and therefore closely resemble those at (c). — Another peculiar instance is given in Ex. 227—5, which see.

Chromatic Chord-progressions.

296. The entire system of chord-succession is divided into two radically distinct domains, the **Diatonic and the Chromatic.**

To the **Diatonic domain** pertain all relations and associations between **any two chords which belong to the same key.** Here, the quality and permissibility of the chord-successions may be, and are, determined by natural harmonic principles, because their relations are defined from a common centre (their Tonic). These rules of diatonic chord-succession are given in Parts I and II (for example, 221, nos. 18 to 27); they are incontestably necessary and just, and cannot be violated with impunity. "Diatonics" is the domain of harmonic Law and Order.

To the **Chromatic domain** pertain all connections between **any two chords which belong peculiarly to different keys.** Here, no natural law of chord-succession can be laid down and defended, because the chord relations cannot be defined from a common centre; *any imaginable succession is possible*, and it is difficult even to systematize, in some degree, the almost inexhaustible multitude of possibilities in this domain (see a, etc.). "Chromatics" is the domain of harmonic Lawlessness. While the chord-associations in the diatonic sphere are the unconstrained consequence of *natural* conditions, the chord-associations in the chromatic sphere are a direct violation of these natural conditions, and are effected by *artificial* means (i. e. by means of the apparently delicate, but in reality most powerful, chromatic "lever," which inflects the chord in such a way as to destroy its contact with its Tonic and cancel its obligations to the latter).

a. The chromatic inflection may be made in *either direction* (upward or downward).

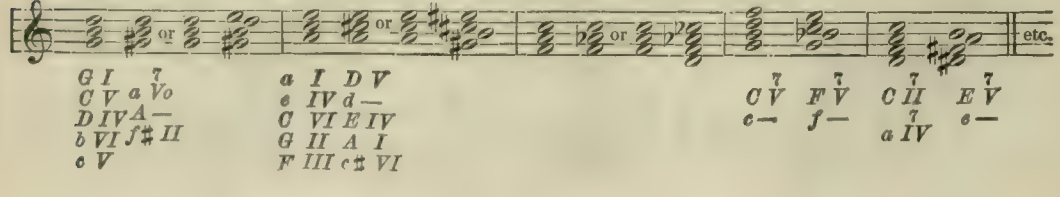
b. It may be applied to *any chord-interval* (Root, Third, Fifth; seldom Seventh or Ninth, and chiefly downward, in these Intervals).

c. It may be applied to almost *any two* chord-intervals at once, or even to *all three* (of a Triad) at once. In this case the inflections are generally made in the same direction, but it is also possible to inflect one Interval upward and another downward; and, if all three are inflected, the chord must be *inverted*.

d. It may be applied to *any chord;* best, to a *Tonic* chord (major or minor, see Ex. 224 a); or to a *Subdominant* or *Dominant* Triad (see Ex. 224 b); or to the *Dominant-Seventh* or *Dom. Ninth* (see Exs. 224 c, and 226); or even to *other 4-tone chords* (II^7, IV^7, VI^7).

e. The chrom. chord-progression may, finally, be either *simple* or *compound*, usually the latter (see 293, Ex. 222).

For illustration (raised Root, raised Third, raised Fifth; lowered Third, etc., etc.):



f. The almost infinite range of possibilities afforded by chrom. inflection is left to the investigation of the student, who is recommended to proceed *systematically* in pursuing the interesting quest. The rules governing the *technical act* are given in 294; the guides through this maze of "wandering" harmonies, the determination of the choice, and extent of their use—these can be dictated only by the taste, tact, and good judgment of the student. But see 297 and **298**; and also 286, 288, 289.

The above tables are illustrated in the following Example:

Ex. 224.

***1) The chrom. progressions at *a.* are made from Tonic-Chords. In this first case, from the *Major* Triad *c-e-g*, as I of C. — *2) From a *Minor* Triad (*a-c-e*) as VI of C. — *3) Minor Triad, as I. — *4) Major Triad, as VI of Minor. — *5) The chrom. progressions at *b.* are made from Dom. or Subdom. Chords. In this first case from the Major Triad *g-b-d*, as V of C. — *6) IV of C. — *7) II of C. This Example shows that an *Inversion* may also be taken. — *8) V of *a*-Minor. — *9) IV of *a*-Min. — *10) The examples at *c.* conform to 296 d, and 297 b. In this case from the $\overset{7}{\text{V}}$ of C. — *11) $\overset{9}{\text{V}}$ of *a*-Min. — *12) $\overset{9}{\text{V}}_0$ of *a*-Min. — *13) $\overset{7}{\text{V}}_0$ of C. (Might also be regarded as the II of *a*-Minor, if the preceding Chord were the I of *a*). —**

297. Among the many curious and exceptional results which attend the use of Chrom. changes, there are two which require special consideration, namely:

a. 1stly: Chrom. progressions are not *necessarily* limited to the Next-related Modulations, but sometimes lead *immediately, and easily, into Remote Keys.* Such irregularities, though *possible* results of chrom. agency, can of course only be admitted when carefully and obviously justified by circumstances. For instance:

Ex. 225.

These Remote Modulations are *all* made according to 296 a (and 276 a), from a Tonic Chord.

*1) The Opp. Mode. — 2) This Mod. is analogous to 289 c: the Tonic (in Bass) is transformed into a Leading-tone. — *3) A Mod. of *six* Degrees, — the remotest that can be made. — *4) The Altered $\overset{7}{\text{II}}$ of D. — *5) Can just as well be *C♯-Major* (with *e♯* in Alto).

b. 2ndly: By means of the chrom. inflection, even the *Dominant Discords* may be turned aside from their strict obligations to the Tonic of their Key, so that instead of *resolving* themselves (as has been hitherto emphatically demanded: see 221 No. 18), they progress into other Keys! This is indicated in 296 d, and Ex. 224 c. — The conditions upon which this extraordinary (but quite common) modulatory proceeding is allowed, are, firstly, that the Dom. Discord should be led chromatically **into another Dominant Discord** (*i. e.* of the other Key), whereby it will appear as if its own obligations had been merely *transferred* to a counterpart-Chord of another Key; and, 2ndly, that the obligations of the first Dom. Disc. *must be fulfilled as nearly as possible*, — that is, that the Seventh or Ninth, or both, should progress *downward*, and, if possible, the Leading-tone upward.

c. There are, naturally, a few exceptions to these rules, which, in common with some other strange harmonic successions, must be placed, roughly, to the account of "Chromatics".

The following table illustrates the progression from the principal Dominant Discords ($\overset{7}{\text{V}}$, $\overset{9}{\text{V}}_0$, $\overset{9\flat}{\text{V}}_0$, $\overset{7}{\text{V}}_0$) of *C*-major, into those of every other Key, in the order of preference:

Ex. 226.

*1) These Chords, excepting *5), can be connected in *any Inversions.* — *2) The Seventh is resolved diatonically downward. — *3) The Dom. Discords, it will be remembered, are the same in Major and Minor. Therefore this may also be *c-Minor*, and *f-Minor* (and *A-*, *D-*, *B-Major*, etc.) — *4) Ex. 224, note *13). — *5) These progressions are only good in this arrangement of parts. — *6) Passive Resolution of the Seventh. — *7) The Seventh progresses chromatically *upward:* this is not good. — *8) An "Enharmonic" change, which will be explained a little later on. —

298. When one Dom. Discord is led chromatically into another, in this manner, the *second one* is generally *resolved into its Tonic Chord.* But it is also possible to progress *again*, chromatically, into a third Dom. Chord, and so on. — Such **continuous** Chrom. Chord-progressions are least confusing and dangerous when they constitute more or less exact *Sequences*; and, in any case, some thread of connection must be pursued in some part or other, as, for instance, the descending progression of the Soprano in Ex. 227—1, in regular chrom. succession; and the regularly ascending chrom. succession in No. 2 (Bass), No. 3 (Soprano), No. 9 (Bass); and the Bass-sequences in Nos. 6 and 4. —

For illustration:

Ex. 227.

*1) The second Chord of each pair of successive $\overset{7}{V}$ths conforms exactly to the Normal Resolution of the first one, excepting that a *new Seventh* is added, each time. This succession is placed at the head of Ex. 226, as the best; and its continuous occurrence in interlinked Sequences, as here, is as simple and natural as anything in "Chromatics" can be. — *2) Chords of the *Diminished Seventh* in chromatic succession. — *3) Cases of this kind, where the $\overset{7}{V}$ of one Key progresses chromatically *into the I of* another Key, are very rare, and difficult to justify: see 297c.

299. The above Examples contain *Passing Modulations* of the most transient kind. In almost every case the Keys are represented by *no more than one single Chord*. This Grade of Modulation corresponds, *in effect*, to the Altered Chords, but should not be regarded as a contradiction of the principle enunciated in 243e (which review). It remains a fact, that *one isolated Chord* does not completely and unmistakably define a Key, but is dependent upon the Chords which precede and (especially) which *follow* it, for its identification. This is proven in Ex. 214.

But when, as in this Example, the adjoining Chords are chromatic, and therefore neither confirmatory of the middle Chord nor of each other, then of course there is no alternative but to define each single Chord, *by conjecture*, according to the Key which it reasonably suggests. The choice between the two Opposite Modes is almost always quite optional; comp. 283, and Ex. 226, note *3). — Finally, when the succession is as rapid as in Ex. 227 No. 8, it is a question whether *any* definite change of Key can be felt at all, or whether the whole is not a series of "Passing-Chords".

For interesting examples of chromatic succession the Scholar is referred to **Bach**, Chromatic Fantasie, meas. 33—41; **Chopin**, Etude Op. 10 No. 3, meas. 38—41; **Schumann**, Novellette Op. 21 No. 3, meas. 43—49; **Wagner**, Overture to Tannhäuser, measures 17—30.

Exercise forty-two.

A. Play Ex. 226 on the Piano, extending each measure to *four* Chords, by striking the I (in any form) before the first Chord, and resolving the second Chord into its Tonic (I or VI, in any form). Example 224, note *10), will serve as a model for Ex. 226, meas. 5. —

B. Make two tables, exhibiting the progression, *1stly, from the I of C-Major (in* any *form) into the* $\overset{7}{V}$ *or* $\overset{9}{V}_0$ *(as* Dim. 7^{th}*) of every other Major Key;* and, *2ndly, from the I of a-Minor* (= VI of *C*) *into the* $\overset{7}{V}$ *or* $\overset{9}{V}_0$ *of all the other Keys.* Thus:

C. Basses with Chromatic Modulations. To be analyzed, as usual.

*1) See Exercise 38, note *5). Dom.-Discord at each *.—Review Exercise 35, note *1) *2) *3).—**Add Short Original Basses.** —

Fundamental principles.

A chromatic change is equivalent to a progression of seven harmonic degrees.

The chrom. change should be made in one and the same part.

The Cross-relation is allowed, when the first tone moves diatonically.

Through the agency of Chromatics, Remote Keys may be obtained directly; and the Dom. Discords can be diverted from their Tonic-resolution, and led into Dom. Discords of other Keys.

In continuous chrom. Chord-successions, the Keys must be defined by single Chords.

Section 4th. Enharmonic Modulation.

300. A progression is Enharmonic when the next higher or lower Letter is so inflected as to *agree in sound* with the original tone, thus: $g\flat$—$f\sharp$; $g\sharp$—$a\flat$; f—$e\sharp$; $c\flat$—b; g—$f\times$ and $a\flat\flat$; etc. —

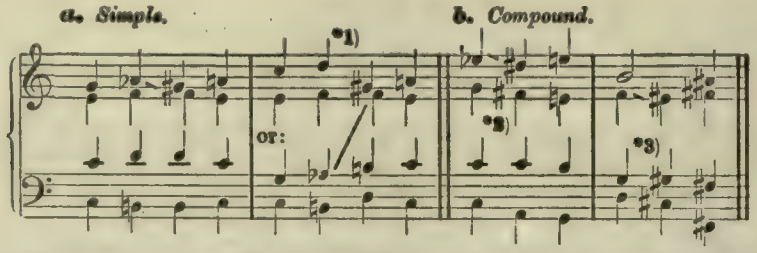
301. **a.** It is usually called the Enharmonic "**Exchange**" or "**Change**", upon the universal assumption that it is *not* a "Progression"; and this assumption is *practically* justified by the location of the tones on modern Pianofortes (and other instruments), where both Enharmonic tones are produced with *the same white or black key*, and therefore are made to correspond exactly in pitch. Still, there is an actual difference, and, consequently, it is *theoretically* proper to call it a "Progression".

b. The actual difference in pitch equals *twelve* harmonic degrees. ($f\sharp$ = 6 sharps, and $g\flat$ = 6 flats. Compare 290 b) Therefore the Enharmonic Chord-progressions must be regarded as still more unnatural and eccentric than the Chromatics. Ex. 206 exhibits the actual Enharmonic difference, at the Key-notes $F\sharp$ and $G\flat$; and the dotted lines indicate the manner in which it appears at other points in the modulatory circle also. See Appendix *D*.

302. The Enh. Change involves an inevitable change of Key, and therefore it is a modulatory factor. Thus: $g\sharp$ is the Leading-tone of *A* and tends towards the "Sharp" Keys; but $a\flat$, which is practically identical in sound with $g\sharp$, is the Dominant Leading-tone of *c*-Minor and tends towards the "Flat" Keys.

303. **Enharmonic Chord-progressions**, like the chromatic ones, are distinguished as ***Simple*** or ***Compound***: ***Simple***, when the Chord undergoes no other change than the Enh. inflection; ***Compound***, when a diatonic or chromatic progression is made simultaneously with the Enh. change. See 293. For example:

Ex. 228.



*1) The enharm. change is divided between Tenor and Soprano: this is allowed. And the progression in Bass does not make the Chord-progression *Compound*, because it does not alter the sound of the Chord. — *2) Here, on the contrary, there are diatonic progressions in Alto and Bass which produce an entirely new Chord-effect. — At *3) all three species of melodic succession are simultaneously represented: *diatonic* in Bass, *chromatic* in Tenor, and *enharmonic* in Alto. See Ex. 226, note *8). —

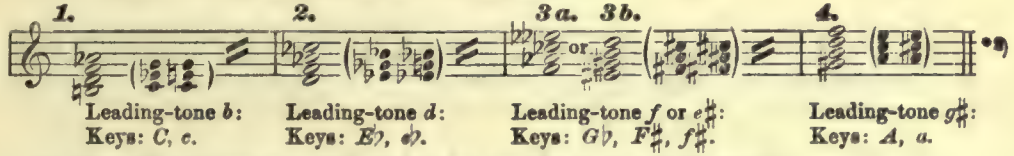
304. **Simple** Enharm. Chord-progressions are only possible when the first Chord is of such a construction that the exchange of Letter does not destroy the co-relation of the Intervals, *i. e.* the *new* Letter must still agree harmonically with the other Chord-Intervals, as well as the *old*. This is the case in Ex. 228 a; the Letters *b-d-f-g*(♯) are as true a Chord-form as *b-d-f-a*(♭). — It is when this is *not* the case, that a simultaneous diatonic or chromatic progression (or both) is necessary, to restore a legitimate Chord-form. Thus: in Ex. 228 b, the Enharm. change of *e*♭ into *d*♯, alone, would entirely cancel its relations to the other tones, and therefore the progressions in Alto and Bass are necessary.

Simple Enharmonic Changes.

305. **The best Chord for Simple enharm. changes is the Chord of the Diminished Seventh** (203 a), the properties of which, in this particular, are so remarkable and extensive that it is often called the "Enharmonic Chord".

Its susceptibility of enharm. transformation is owing to its peculiarity of structure, — explained in 203 b, c, and d. As the Chord always sounds the same in every shape, and as there is, consequently, no distinction whatever in sound between the Intervals of the Chord, it follows **that any (and each) of the four tones** of which the Chord consists, **may be regarded as a Leading-tone.** This, of course, involves a successive change of *Key*, and, consequently, of *notation*; and this change of notation is "Enharmonic". — Applied to the Dim. Seventh on *b*, the result will be the four Minor Keys (and also the four *Major* Keys: see 205) of which the tones *b*, *d*, *f*, and *a*♭ (or *g*♯) are respectively the Leading-tones. Thus:

Ex. 229.



*1) All of these Examples in Enh. Modulation must be studied **at the Piano!**

*2) These 4 Chords correspond exactly, *in sound*, to those in Ex. 146 (which see!) The modulatory distinctions obtained by making each one a separate and independent *Chord of the* **Seventh** upon the separate tones of the original Chord, are apparent in the different **Resolutions.** While all 4 Chords of Ex. 146 resolve alike into the I of *c*-Minor, they each resolve, here, into a different Key, according to their notation. The Enh. changes are easily found, by simply comparing the Chords with each other. —

306. It is evident, then, that wherever the Dim. Seventh occurs, in any of the above 8 Keys (in the notation corresponding to its Key), it may enharmonically change its notation to that of any other of the 8 Keys, and so effect an **Enharm. Modulation.** For illustration.

Ex. 230.

*1) This is a change from Chord No. 1 to No. 4 (of Example 229). It is not usual to make the enharm. change, as here, upon one single beat ($a\flat = g\sharp$ in Tenor). — *2) Here, the change (from 3 b to 4, Ex. 229) is made upon two separate beats. This is much better than *1), because the ear has more time to follow and apprehend the change. Comp. 308. — *3) From Chord No. 2 to No. 1 (Ex. 229). It is admissible to make the enh. change from one part to another. Ex. 228, note *1). — *4) From No. 3 a to No. 2 (Ex. 229). The Bass-progression (c? to $d\sharp$) is allowed, because it is Chord-repetition, *in sound*. Comp. Ex. 149, measure 4. — Nos. 2 and 4 of the above Example sound best, because the Keys are Next-related. —

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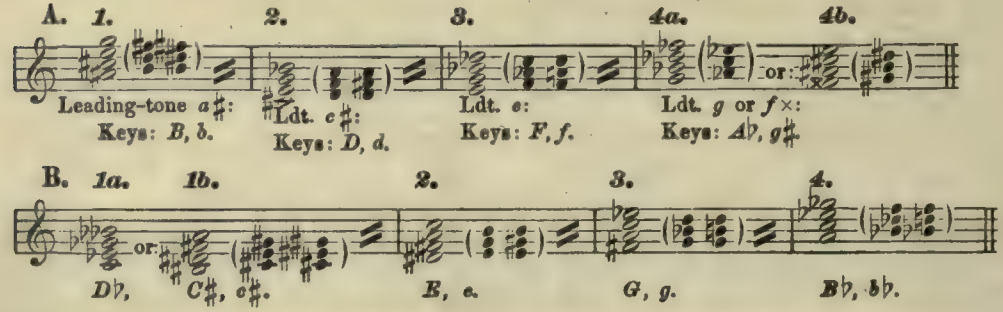
307. There are only **three** Chords of the Diminished Seventh in Music **which differ in sound**; for, as has just been seen, those which represent four of the 12 Minor Keys, though differing in Notation, ***sound*** exactly alike; in other words, one Chord of the Dim. Seventh answers (***in sound***, though not in Notation) to eight different Keys, and therefore ***three different*** Chords of the Dim. Seventh cover all the 24 Keys.

There are, of course, *twelve* of these Chords in different *Notations*, and there would be 24, but for the fact that the notation is similar in Minor and Major. — The *Minant Seventh* (for instance), on the contrary, actually occurs in 12 different *sounds*, as well as Notations, because in no two Keys (excepting each Opposite Mode) is it exactly alike. See, for illustration, the table made in Exercise 22, **A.**

Besides the Dim. Seventh on the note b, treated in Ex. 229, there are two others, then, which lie respectively a half-step above and below the former. Their enharmonic ambiguity is determined in the same manner. Thus:

Ex. 231.



308 When the Keys are Remote (and, in fact, in almost any case) the enh. Chord should be ***prolonged*** as far as the Rhythm will permit. The longer it is dwelt upon, the less perceptible will the change of Key be. Comp. 282 c. For illustration:

Ex. 232.

*1) The enharm. Chord lasts a whole measure. — *2) These enharm. changes correspond to Ex. 229, No. 3 b to No. 2. — *3) Ex. 229, No. 1 to No. 3 b. — *4) The moment a Dim. Seventh becomes a *complete* $\overset{9}{V}$ (by the addition of the *Root*) its identity is fixed, and it ceases to be Enharmonic. — *5) The enharm. Chord extends through 6 measures. — *6 Ex. 231 A, No. 3 into No. 2. — *7) The effect of this change can only be properly understood by *first striking the Tonic Chord* of *c*-minor. — *8) First strike the I of *f*-minor. —

Exercise forty-three.

*1) The pupil may be at a loss to understand why, in several of the above changes of Key, the Modulation is not made *chromatically* instead of enharmonically, seeing that the former process is much more direct and simple than the latter. It will be observed that each Dim. Seventh (before its enharm. change) is introduced in its *legitimate* capacity as Dom.-9th Inc. of the foregoing Key, and it may be justly assumed that this is the only *absolutely correct* way. If, as at *2), the Dim. Seventh does not belong to the foregoing Key, then, of course, the chromatic introduction is unavoidable. It is necessary to state, however, that it is the common practice, even among classical composers, to ignore the confusing enharm. change, and progress, chromatically, directly into that form of the Dim. Seventh which is valid for the desired Key, — especially when the Keys are Next-related. Thus, in Ex. 230—1, no composer would write the $a\flat$ and $g\sharp$ together on one beat, but would use $g\sharp$ alone. Similarly, in Ex. 230—2, the $e\sharp$ on the 3rd beat (in Alto) would commonly be written $f\natural$ *at once*, as chromatic alteration of the preceding $f\sharp$. The enharm. change in some of these examples only serves to exhibit the actual nature of the Modulation; in other examples, however, where the *actual* nature is most conspicuous, (as in Ex. 232 237 and 238) the enharm. change is obligatory.

Other Resolutions of the Chord of the Dim. Seventh.

309. The modulatory capacity and utility of the Chord of the Dim. Seventh are by no means exhausted in the above connections, because this most ambiguous and flexible of all Chords is not limited to its original signification as *Incomplete Dom. Ninth*, and to its original location *upon the Leading-tone*. These are its *legitimate* signification and location, but, as **Altered Chord**, *it occurs in*

several other locations in both the Major and Minor Modes! These may be found by referring to the tables of Altered Chords, and are as follows:

a. In Ex. 187 c, a Dim. Seventh is found, as Altered $\overset{7}{\text{II}}$ of the **Major** Mode, with raised 2nd and 4th steps. Its characteristic features are, that *it contains the* **Tonic-note** of its Key, and *resolves into the I.*

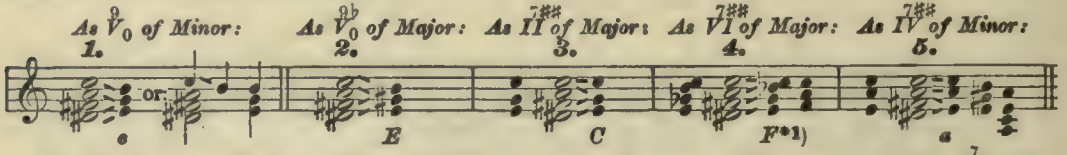
b. In Ex. 188 c. a Dim. Seventh appears, as Altered $\overset{7}{\text{VI}}$ of the **Major** Mode, with raised 1st and 6th steps. It contains the **Dominant**-note of its Key, and resolves into the $\overset{7}{\text{V}}$.

c. In Ex. 192 a, a Dim. Seventh is found (Chord No. 5), as Altered $\overset{7}{\text{IV}}$ of the **Minor** Mode, with raised 4th and 6th steps. It contains the **Tonic**-note of its Key, and resolves into the I.

d. To these should be added, in order to complete the table, the two *original* locations of the Dim. Seventh, as they are given in the foregoing Examples. They are found, originally, in Ex. 146 (the legitimate $\overset{9}{\text{V}}_0$ of **Minor**), and in Ex. 185 (Chord No. 2; the Altered $\overset{9}{\text{V}}_0$ of **Major**, with lowered 6th step). They both contain the **Leading-tone** of their Key, and resolve into the I (or first into the $\overset{7}{\text{V}}$ and then into the I).

Applied to the Ch. of the Dim. Seventh upon $d\sharp$ (for example) the results, without enharmonic changes (in Notation), are as follows:

Ex. 233.



*1) *F-Major*, according to 309 b; but *f*-**Minor** may also be taken, in consequence of the $\overset{7}{\text{V}}$, which resolves into both Modes (283).

310. The principles of enh. transformation explained in 305 (which review) apply, self-evidently, to the Ch. of the Dim. Seventh in ***all*** of its possible significations. Therefore the Chord at Ex. 233—3 will be found not only as $\overset{7\sharp\sharp}{\text{II}}$ in *C*-Major (whose **Tonic**-note it contains) but as $\overset{7\sharp\sharp}{\text{II}}$ **in all the four Major Keys** of which its four tones are the **Tonics**, namely· *C*, *A*, $F\sharp$ (or $G\flat$), and $D\sharp$ (or rather, $E\flat\flat$). Similarly, Ex. 233—4 will be found as $\overset{7\sharp\sharp}{\text{VI}}$ in all the **four Major** Keys of which its tones are the **Dominants** (309 b). And Ex. 233—5 belongs as $\overset{7\sharp\sharp}{\text{IV}}$ to the **four Minor** Keys whose **Tonics** it embraces (309 c). In each of these four Keys the Dim. Seventh has a ***different Notation***: *i. e.* is enharmonically changed, of course; but it retains each time the ***same Chord-name*** throughout.

311. Summing up these possibilities, it appears, then, **that any one single Chord of the Dim. Seventh will occur, in some Notation or other:**

in the 4 *Minor* Keys (as $\overset{9}{\text{V}}_0$)
and 4 *Major* Keys (as $\overset{9\flat}{\text{V}}_0$) } of which it contains the *Leading-tones;*

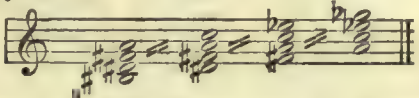
in the 4 *Minor* Keys (as $\overset{7\sharp\sharp}{\text{IV}}$)
and 4 *Major* Keys (as $\overset{7\sharp\sharp}{\text{II}}$) } of which it contains the *Tonics;*

and in the 4 *Major* Keys (as $\overset{7\sharp\sharp}{\text{VI}}$), of which it contains the *Dominants.*

In this manner it is easy to determine the *Keys* to which the Chord will belong, and the *Notation* then simply agrees with the Key (and Chord) in question. The *Resolution* of each Chord is also very simple; excepting the Altered Six-seven, they all progress *directly into their I.* See 309 a—d.

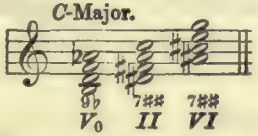
The following table exhibits the Notations of the Dim. Seventh on $b\sharp$ (or $c\flat$) in the above 20 Keys.

Ex. 234.



As $^{9}_{\sharp}V_0$ of $c\sharp$ — e — g and $b\flat$
„ $^{9}_{\flat}V_0$ of $C\sharp$ — E — G — $B\flat$ } with the *Leading-tone:* Res. into the I.
„ $^{7\sharp\sharp}IV$ of $f\sharp$ — a — c — $e\flat$
„ $^{7\sharp\sharp}II$ of A — C — $E\flat$ — $G\flat$ } with the *Tonic:* Res. into the I.
„ $^{7\sharp\sharp}VI$ of D — F — $A\flat$ — $C\flat(B)$ with the *Dominant:* Res. into the $\overset{7}{V}$.

There are only four, of all the 24 Keys, which are not represented by this Dim. Seventh, namely: d, f, $g\sharp$ and b-Minor (those *Minor* Keys whose *Dominants* occur in the Chord), and even these are ultimately obtainable. See Ex. 233, note *1). — *All the Major Keys are represented*, not only by *this* Chord, but by *each of the three Dim. Sevenths* (307). It has already been seen that each Major Key contains *all three* of these Chords, thus:



which accounts for *each single one* occurring in *all* the Major Keys (in four different Notations).

312. From this it is manifest that *any* Chord of the Dim. Seventh may serve as a modulatory medium between any of the 12 Major and 8 Minor (*i. e.* 20) Keys in which it occurs. That is to say: the Dim. Seventh in Ex. 234 can be introduced (probably from a Tonic Chord) in *any* of the 20 given Keys, and then changed and resolved into *any other* of the 20. In modulating along any of the 4 *vertical* rows of Keys, no enharmonic change is necessary; but in modulating from any row into another row (to the right or left, in this table), the Notation must be altered. — For illustration:

Ex. 235.

*1) By changing the $b\sharp$ (of the first measure) into $c\natural$, the Chord loses its *D*-Major signification and is turned into *e*-Minor. See Ex. 234. — *2) 309a. — *3) The same Chords as at *2), but in reversed order. — *4) The same Chords at at *1); but in different Keys. — *5) Strike first the Tonic Triad of the Key! — *6) Like Ex. 220. —

113. The ready and successful application of this complicated cluster of modulatory resources demands a ***thorough*** acquaintance with the different *Notations* and *Names* of the Chords of the Dim. Seventh, and with the Introduction and Resolution of each, according to the Key it is in. It may be remarked, that there are two different ways of studying the modulatory facilities of the Ch. of the Dim. Seventh· 1^{stly}, at the *table*, with strict regard to the *Notation* and actual harm. signification of the Chord; and 2^{ndly}, at the *Piano*, without regard to the Notation, but simply defining the location and progression of the Chord according to 311. The latter mode of treatment is the most *practical;* and, if preceded by a thorough solution of Exercise 44 A and B, is almost more recommendable than the former. —

Exercise forty-four.

A. The Chords in Ex. 234 are to be written out ***separately, with their 20 corresponding Progressions,*** always commencing with the Tonic Chord of the respective Key. Ex. 233 serves as a model. —

B. Define the *Notations* of the ***other two*** Dim. Sevenths (the one with $c\sharp$ or $d\flat$, and the one with $b\natural$ or $e\flat$) in the 20 Keys in which they may occur (311), and add the Introductions and Progressions as at A. —

C. Basses, to be worked out and analyzed, as usual. — The Positions may be ignored

See **Rubinstein**, Prelude, Op. 24 No. 5, measures 92, 93—97; 108, 109—113, 124—129. — **Rubinstein,** "Le Bal" Op. 14, Mazurka (No. 8), measures 50, 51; 54, 55, 58, 59; 62. 63. —

Fundamental principles.

A Chord of the Dim. Seventh occurs, as *Legitimate* Chord, in the 4 Minor Keys of which its four tones are the Leading-tones. —

These changes of Key involve changes of Notation, which, as they do not alter the *sound* of the Chord, are Enharmonic. —

A Chord of the Dim. Seventh occurs, as *Altered* Chord, in the four Major Keys of which its tones are the Leading-tones; also in the 4 Major and 4 Minor Keys of which its tones are the Tonics, and in the 4 Major Keys of which its tones are the Dominants. —

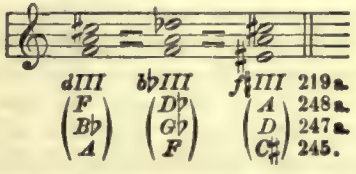
The Notation of the Chord agrees with its Key. —

Each of the three Dim.-Seventh-Chords is a modulatory medium between *any* of the 20 Keys in which it may occur.

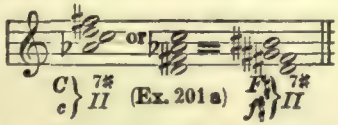
Other Enharmonic Chords.

314. **Besides the Chord of the Diminished Seventh, there are a few other Chords which are susceptible of *Simple* enharm. transformation, namely:**

1. The *Augmented Triad* (composed, like the Dim. Sevenths, of equidistant intervals). For example:



2 Certain *Mixed Chords:*



3. The most common of these comparatively inferior enharm. changes is effected, however, with the Ch. of the Dominant Seventh, *which is similar in sound to a Mixed Second-class Chord of the Major and Minor Keys whose Tonics correspond to the Leading-tone of the original Key.* Thus:

Ex. 236.

1) Ex. 204, Chord No. 4. — *2) Ex. 201, Chord No. 6. Compare this treatment of the $\overset{7}{V}$, with 297 b. And observe that here the process indicated in 289 c is exactly reversed! — *See Appendix F.

The Enh. Modulations with this Chord, which were much in vogue at one time, can be made equally well in either direction, between *any* two of the four Keys represented. For example·

Ex. 237.

Compound Enharmonic Changes.

315. The distinction between Simple and Compound enharm. progressions is explained in 303 and 304 (which review). *Compound* changes are the most gratifying and intelligible, because the diatonic or chrom. progressions which in that case accompany the enharm. change, assist the ear in apprehending the latter, and in following the Modulation. This is impossible in *Simple* enharm. Chord-progressions, because there is no change in *Sound*, and hence the intention of modulating is not perceptible until it has actually taken place. The pupil will become sensible of this important distinction, upon comparing the last 6 or 8 Examples with the following one, which contains only a few illustrations of the almost endless variety of Compound enharm. Chord-progressions:

Ex. 238.

*1) These two measures, in both instances, are actually alike. The enharm. change in the first measure is only rendered necessary by the transition from sharps into flats. — *2) The Tonic becomes a Leading-tone (in Bass); comp. Ex. 221—4, especially the 2nd measure, where there is a similar enharm. change. — *3) This Chord may be not only in *A*-Major, but also in *D*, *d*, *c*♯, *E*, according to the manner of its Introduction. This principle, which greatly multiplies the modulatory possibilities, applies to a certain extent to every Chord in Music; especially to the Concords. — *4) This Chord may progress into the Keys *e*, *E*, *C*, *a*, or *F* (see Ex. 233). — *5) Ex. 226, note *8). — *6) The Opposite Mode; comp. note *1). — *7) See 289 a. — *8) Strike first the Tonic Chord of *f*-Minor. — *9) This whole series of Chord-progressions closely resembles Ex. 226. But see 297 a. — *10) Comp. Ex. 227, note *3). —

Exercise forty-five.

Here, at the close of Modulation, **Short Original Phrases** may be made, applying *all* the principles explained throughout this Division, in the most general and unconstrained manner. —

Fundamental principles.

The Chord of the Dominant-Seventh may be enharmonically changed, so that its Leading-tone becomes a Tonic. —

Compound enharmonic Chord-progressions are the best. —

Section 5th. The Harmonizing of Melodies, with Modulations.

316. **a.** Harmonizing a Melody with Modulations is, *as far as each separate Key extends*, precisely the same process as before. Therefore the scholar must first of all review the former rules, — especially paragraphs 238, 239, and Ex. 184.

b. The only new thing that presents itself here is to determine *what changes of Key are necessary, and where the changes take place.* From the point where a Key begins, until it is exchanged for another, the Melody-notes are harmonized in the usual manner, *according to the Scale-step of that Key!*

317. The changes of Key, or, in other words, the points where Modulations are to occur in the Harmony, may be defined:

1stly, by **Accidentals** *in the Melody itself;*

2ndly, by the *general construction* of the Melody, which affords more or less distinct evidence of *intentional* Modulations; and

3rdly, by *option*, at any point in the Phrase where the Melody will admit of a change of Key

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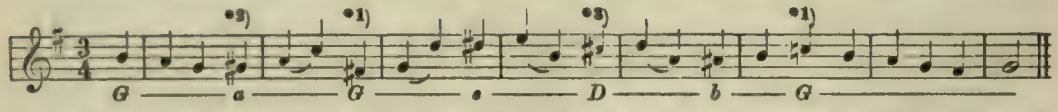
1stly. Melodies with Indicated Modulations.

318. **Accidentals** in the course of a Melody indicate either Altered Chords, or changes of Key.

(The former are of comparatively little consequence, and will therefore be set aside for the present).

This is exhibited in the following Example, in which the Keys are indicated below the notes at the points where they *begin*:

Ex. 239.



*1) These Accidentals, though apparently superfluous, are actually necessary, as contraditions of the foregoing Keys. — *2) *A-Minor*, not *Major!* The Keys must maintain close relationship, as much as possible. — *3) *D-Major*, not *Minor*, for the same reason. —

Applying the simple fundamental rules of Modulation to this Melody (namely: to leave each Key if possible at one of its Tonic Chords, and to enter the next one through its Dominant Chords — see 272; 274 b, c; and 276 a), the result is as follows:

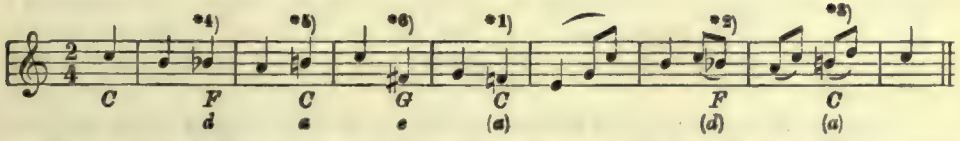
Ex. 240.

319. a. In the above Example, the Accidentals proved to be the ***Leading-tones*** of the required Keys, with the single exception of $c\natural$ in the 6th measure, which merely served to indicate ***that the preceding Key had been cancelled.*** Such Modulations as the latter may be called "Negative"; and, as they afford no positive indication of what the coming Key is to be, almost invariably leave a choice between the ***two Relative Keys!*** For instance, the $c\natural$ in the above Example indicates that the ***two-sharp*** Key (*b*-Minor) has been reduced to a ***one-sharp*** Key; but there is nothing in the $c\natural$, nor in the tones which immediately follow, to define ***which*** of the one-sharp Keys (*G* or *e*) is intended. Consequently, either *G*-Maj. or *e*-Min. may be taken. Thus.

Ex. 240b.

b. This choice between the two *Relative* Keys (not to be confounded with the ***Opposite Modes!*** See Ex. 239, notes *2) *3),) — is possible at other points also, and usually depends only upon the succeeding Melody-notes. For example, the $f\sharp$ in the 2nd measure of Ex. 240 might also be regarded as an indication of ***e-Minor;*** but the two slurred notes which follow (*g*—*d*) prove that *G*-Major is intended. The same applies to $c\sharp$ in the 4th measure, which might also be ***b-Minor***, but for the following *d*—*a*. Compare 238, rule 1. — This point is illustrated in the following Melody:

Ex. 241.



*1) *a*-Minor is not possible, on account of the next measure. — *2) *d*-Minor is impossible, because of the $c\natural$ which is slurred *before* the $b\flat$. — *3) Must be *C*-Major, on account of the Cadence. — For these reasons it is best to take *d*-Minor at *4), and *a*-Minor at *5); at *6) ***G-Major***, because of the two preceding ***Minor*** Keys. For illustration:

Ex. 242.

2ndly. Melodies with Intimated Modulations.

320. There are certain features in the *construction* of a Melody which afford almost if not quite as unmistakable signs of a necessary change of Key, as Accidentals do. The strongest intimations of this kind are found:

1stly, at the *Cadences*, and

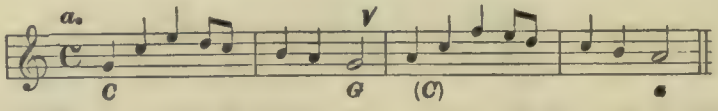
2ndly, in the arrangement and treatment of certain Scale-steps, — especially the *Leading-tone*.

In the first of the following Melodies (Ex. 243. a) there are no Accidentals at all to indicate positively that the original Key (*C*) is anywhere abandoned. But is is nevertheless ***probable*** that the Semi-cadence is made in *G*, and ***certain*** that the Perfect Cadence is in *a*-Minor. —

Ex. 240 b also illustrates this principle; the Modulation from *e*-Minor back to *G*-Major is only intimated by the Cadence-note. If the latter were *e* instead of *G*, as it might easily be, it would continue *e*-Minor to the end. —

And it is also certain that the 3rd measure (Ex. 243, a) does not continue in *G*-Major, because the arrangement of tones does not conform to that Key; especially the $f\natural$ (3rd beat) which indicates either a return to the original Key of *C*, or the point of transition into the ultimate *a*-Minor.

Ex. 243.



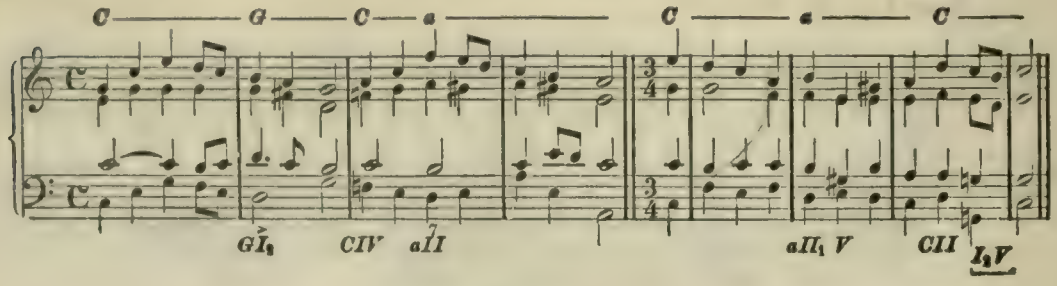
In the following Melody:

the Key of *C*-Maj. evidently ceases at the end of the first measure, because the ♭ in the next measure *cannot be the Leading-tone* of *C*, and progress as it does, *downward* to *e*. It is therefore obvious that *a*-Minor (indicated by $g\sharp$) extends back to this *b*. — The Cadence must be made in *C*, of course.

How far "back" such intimated Modulations reach, or, in other words, at exactly what beat the new Key will *begin*, depends upon circumstances, and will generally be determined by experiment. Comp. 238, rule 4. —

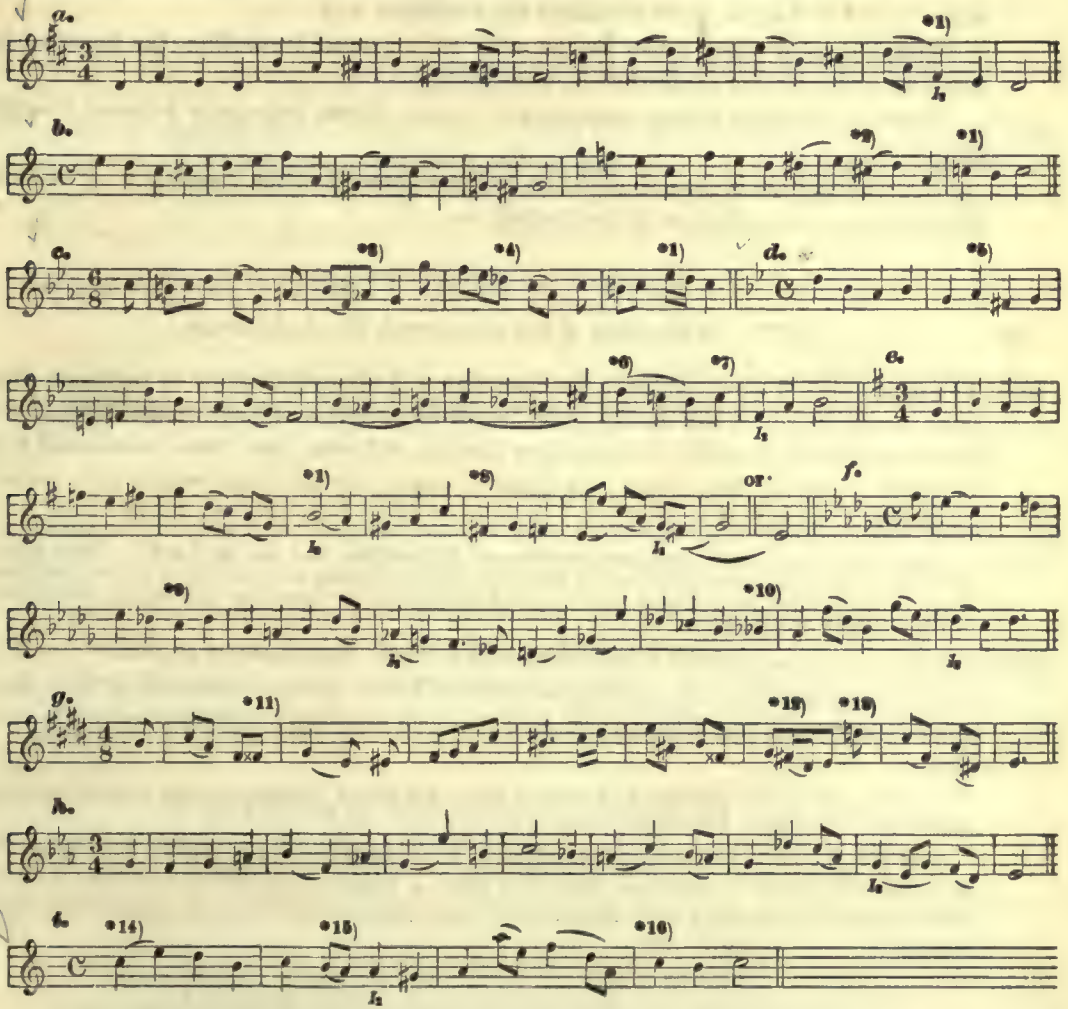
The above Melodies will then be harmonized about as follows:

Ex. 244.



Exercise forty-six.

Melodies with Indicated and Intimated Modulations. Review, thoroughly, 238 and 239. —



*1) See 160. — *2) *D*-Minor follows *e*-Minor directly, in this case, because there is a melodic Sequence: Comp. Ex. 239, note *2). — *3) *E*♭ or *c*; the former is better, because *c-Minor* is sufficiently represented, as original Key. — *4) *A*♭ or *f*. — *5) *G*-Minor begins at this 2nd beat, because the note *a* cannot, in this case, be harmonized as Leading-tone of *B*♭-Major (Comp. Ex. 243, b). — *6) Here the *D-Major* I should be used, as V of *g-Minor*. — *7) II_1 of *B*♭. — *8) *G* or *e*. — *9) *A*♭ I, as V of *D*♭. — *10) Lowered 6th step of *D*♭. — *11) It is evident, from the two slurred notes which follow, that this *f*× is only the raised 2nd step of *E*, and not a Leading-tone of *g*♯. It will be an Altered V. — *12) *E* or *c*♯. — *13) Probably *f*♯-Minor, on account of the following slur. — *14) *C*-Major. — *15) *A*-Minor begins at this 2nd beat (Bass note *d*), compare note *5). — *16) *C*-Major, I_2. —

Fundamental principles.

Accidentals in the Melody usually indicate Modulations, and are either the Leading-tone of the required Key, or serve to cancel the foregoing Key. —

From the point where a Key begins until it is replaced by another, the tones are harmonized according to the Scale-steps of that Key. —

There is usually a choice between the *Relative* Keys; but rarely between the Opposite Modes. —

The Cadence-notes, and peculiarities in the treatment of the Leading-tone etc., indicate Modulations, in the absence of Accidentals. —

3rdly. Melodies with optional Modulations.

321. The possibility of modulating, in the Harmony to a given Melody, is by no means limited to those points at which the *Melody itself* demands a change of Key. *Transient* (*i. e.* Passing) Modulations may be made at almost any Accent, and even upon some unaccented beats, by simply intensifying the *Triads*, at those places, into the *Keys* which they respectively represent.

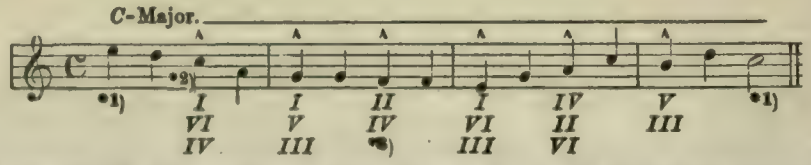
The possibility of rapid, and even continuous, Modulations was seen in Ex. 227. Their effect being, obviously, to produce more extensive and striking harmonic contrast and coloring, it follows that their application will depend upon the degree of effect which is desirable or admissible, and will be determined chiefly by the *character* of the Melody. —

322. The rule for these optional Modulations is as follows. *Every Major or Minor Triad**1) *which occupies an* accented *beat, may become a* Tonic Triad (of the corresponding Key, of course), *provided the preceding Melody-note can be harmonized with any* Dominant *Chord of that Key.*

*1) This modulatory principle is limited to Major and Minor Triads, as being Chords which represent Major and Minor Keys. Four-tone Chords, and Discords, do not indicate Keys. —

The Triads will be first defined according to the Scale-steps of the *original* Key, upon the usual assumption that each Melody-note may be a *Root*, a *Third*, or a *Fifth* of some Chord of the Key. This ensures the necessary next-relationship, and decides what Keys are represented. For illustration:

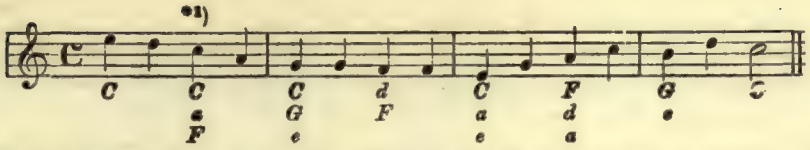
Ex. 245.



*1) The *first* and *last* Accents must, of course, be excepted. — *2) This Melody-note *c* (the 1st step of the Scale) may, according to former rules (Ex. 184), be harmonized with the I, VI or IV and Inversions: in other words, *it may be a* Root, *a* Third, *or a* Fifth. — *3) Here, only two Triads are available, those on *d* and *f*. The Triad on *b*♮, being a Diminished Chord, does not represent any Key. —

323. a. These Major and Minor *Triads* of the original Key may, as stated in 321, be regarded as representatives of their corresponding Maj. and Min. *Keys*, upon the conditions mentioned. Thus:

Ex. 246

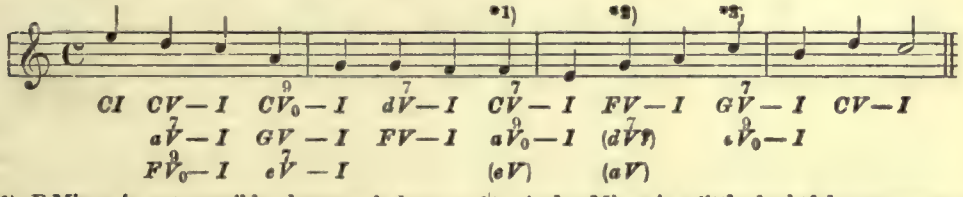


*1) The Triads I, VI and IV of the original Key (*C*-Major), are the Tonic Triads of *C*-Major, *a*-Minor and *F*-Major respectively. And the Keys at the other Accents are found in the same way. —

b. In order to intensify these simple "Chords" into the complete impression of "Keys", they must be associated with the respective Leading-tones (271), or, more exactly, must be preceded by the necessary modulatory (*Dominant*) Chord (322). *If the* preceding *Melody-tone will admit of this*, the Key in question is possible; otherwise not.

Applying this test to the above Melody, the result will be:

Ex. 247.



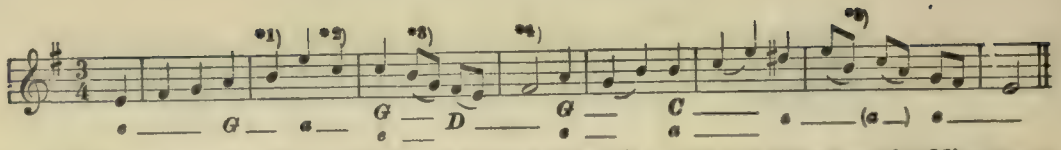
*1) *E*-Minor is not possible, because it has no $f\sharp$! And *a*-Minor is a little doubtful on account of the $g\sharp$ which *follows*; from which it appears that, as usual, some consideration must be taken of the *following* tone, also. — *2) In *d*-Minor, the *g* in Soprano would be an *ascending* Seventh (of the $\overset{7}{V}$), and is therefore doubtful. But see 185 a. — *A*-Minor is impossible, as it has no $g\sharp$. — *3) *E*-Minor is doubtful, because of the $d\sharp$ in the next measure, and also because it is too near the Cadence. —

c. This Melody may be harmonized, then, 1$^{\text{stly}}$, in *C-Major throughout*; or, 2$^{\text{adly}}$, any one of the above Keys may be introduced as *single* Passing-Modulation; or, 3$^{\text{rdly}}$, *several or all* of them may be utilized, in a great variety of successions. The following Modulatory-lines are possible: 1. *C*-Major throughout. 2. *C*—*C*—*G*—*C*—*C*—*F*—*C*———; 3. *C*—*a*—*e*—*d*—*C*—*C*—*G*—*C*; 4. *C*—*a*—*G*—*F*—*a*—*C*——; 5. *C*—*F*—*C*—*d*—*a*—*C*—*G*—*C*; 6. *C*—*F*—*G*—*C*—*C*—*F*—*G*—*C*; and so forth. For example, No. 3:

Ex. 248.

324. Melodies in Triple Rhythm often admit of such optional Modulations at *unaccented* beats also. The following Period, which may be harmonized in *e*-Minor throughout (as there are no positive contradictions of the original Key anywhere in its course), evinces a strong inclination towards *D*-Major at the Semi-cadence, and admits of other Passing Modulations, as follows.

Ex. 249.



*1) *B*-Minor is not possible on this Accent, because of the $a\sharp$. — *2) The indications of *a-Minor* are so strong through this whole measure (the first two tones representing its V, and the last tone its I), that the unaccented 3rd beat suffices for the Mod. — *3 The slurred 2nd beat suggests *G*-Major, although *unaccented*. — *4 Could not very well be the Relative, *b*-Minor. — *5) There are the same indications of *a-Minor* here, as at note *1); but there is hardly time to make the Mod., except by taking the *E-Major* I on the first beat (as V of *a*-Minor). — The result is

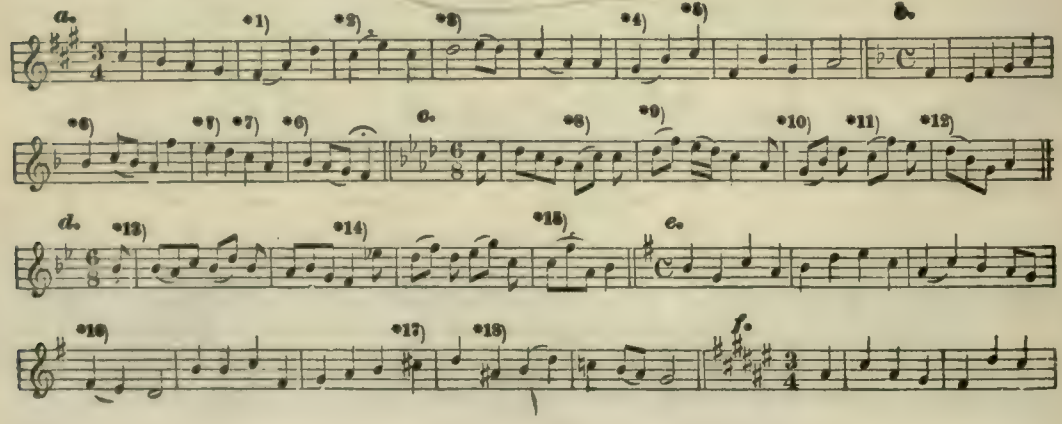
Ex. 250.

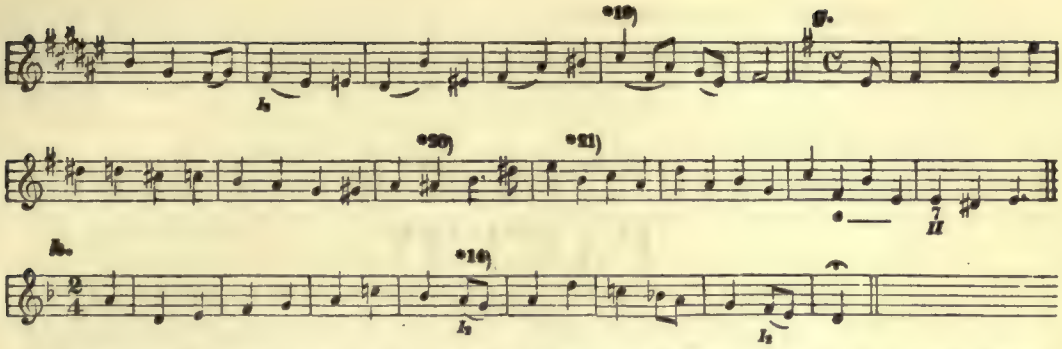
*1) Ex. 249, note *5). The only difference between *E-Major* and *Minor* is the $g\sharp$ (in Bass), which is preferable to $g\natural$, on account of the following *a*-Minor. Compare 283. — *2) This Melody may, of course, as already stated, also be harmonized in *e*-Minor throughout, without the optional Passing-Modulations. —

Exercise forty-seven.

A. Harmonize Ex. 247 (perhaps at the Piano — the ***Bass alone*** in the left hand) in the 6 ways shown in 323 c (excepting No. 3, which is already given in Ex. 248). — And also Ex. 249, first in ***e-Minor*** throughout; and afterwards with *G*-Major in the 5th measure, and *a*-Minor in the 6th measure. —

B. Harmonize the following Melodies; each in ***at least two ways.*** —





*1) $f\sharp$-Min. — *2) A-Maj. — *3) D or b. — *4) E-Major, but not $c\sharp$-Min. — *5) A-Major probably begins at this beat (as I), because E-Major *ends* on the preceding beat. — *6) $B\flat$ or g. — *7) At each of these Accents either C or a may be taken: probably C first. — *8) $A\flat$ or f. — *9) $D\flat$ or $b\flat$. — *10 Not e-Minor. — *11) Not $A\flat$-Major. — *12) Not $D\flat$-Major, unless the following slur is ignored (which is possible). — *13) See 233. — *14) F-Major. — *15) Might be F-Major. — *16) D-Major, I_2. — *17) From this point these Melodies contain *indicated* as well as *optional* Modulations. — *18) The next notes b and d are so suggestive of the I of G-Major, that the preceding $a\sharp$ might easily be a *raised 2nd step* ($\overset{\sharp}{\text{V}}$) of G, instead of b-minor. — *19) These slurred notes must be the I_2 of $F\sharp$-Major, and therefore the preceding $b\sharp$ *must* be the raised 4th step (probably $\overset{7\sharp\sharp}{\text{II}}$: see 247 b) of $F\sharp$. — *20) The following tones prove that this must be *e-Minor*, therefore the $a\sharp$ is a raised 4th step; the best Chord is the $\overset{\sharp}{\text{IV}}_1$. — *21) See Ex. 249, note *5).—

C. To this Exercise may be added the Melodies given in Exercises 33 and 34, to be harmonized with Passing Modulations. —

Fundamental principles.

Passing Modulations may be made, optionally, at almost any Accent. —

Every accented Major and Minor Triad may become a I of the corresponding Key, if the *preceding* Melody-note belongs to the Dominant Chords of that Key; and if not too rudely contradicted by the *following* tone. —

PART IV.

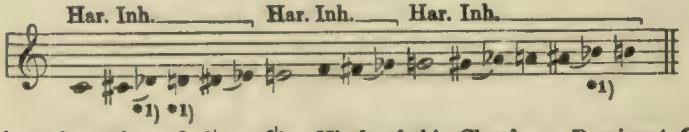
The Inharmonic (Non-harmonic) Intervals.

325. a. When 3, 4, or 5 tones are combined in thirds, they mutually accord, and constitute a harmonic body which affects the ear agreeably. Such tone-combinations are called **Chords** (see 31, 33), and the separate tones are **Harmonic** Intervals, or **Chord**-intervals.

b. A body of tones, united in intervals which do not conform to this rule for the construction of Chords, is called an **Inharmonic** Combination, and the tone or tones which disagree with the structure of thirds are Inharmonic Intervals.

c. The Inharmonic tones are those *which lie* between the Chord-Intervals, and, consequently, do not belong to the Chord. For illustration, in the I of *C*-Major, the tones *c-e-g* are Harmonic, but all the other (intermediate) tones, diatonic and chromatic, are inharmonic, *in connection with that Chord*. Thus:

Ex. 251.



*1) *B♭* might be a Seventh, and *d♭* or *d♯* a Ninth of this Chord, as *Dominant Chord* of *F*-Maj. or Minor. But they are inharmonic in the Chord *as I of C-Major.*

326. It is evident that the quality "Inharmonic" is merely relative, and depends upon the Chord. Therefore, before it can be decided whether a tone is Inharmonic or not, the identity of the Chord (in connection with which it appears) must be established. This may be done by the accompanying parts, or it may be obviously deduced from the *connections with the preceding and (chiefly) with the* following *Chords*. Thus: (the Inharmonic notes are marked 0):

Ex. 252.

*1) The weight (duration) of the tones in the Bass clef, compared with the lightness and brevity of the upper tones, sufficiently defines both the Harmonic and Inharmonic notes. — *2) The peculiar Bass figuring, $\frac{7}{4}$, shows at once that the tones are combined in an irregular, non-harmonic way. Whether the $\frac{7}{4}$ is a distortion of $\frac{6}{4}$, or $\frac{7}{3}$ or $\frac{6}{3}$, depends chiefly upon the Chord which follows. At *2) it is evidently the I_6 of C; at *3), the V; and at *4), the IV_1. — *5) The *d* in Soprano cannot be a "Ninth", because there is no Seventh with it. See 192 b, 2ndly.

327. Inharmonic notes are employed for the purpose of embellishing and animating the simple Chords, and adding melodic significance and grace to the separate parts. Hence, the manner and extent of their use depends upon the degree of effect desired.

There are four kinds of Inharmonic tones: the **Organ-point**, the **Suspension**, the **Anticipation**, and the **Neighboring-Note**; which are distinguished according to the manner in which they enter and progress. They may also be divided into three groups, as follows: The Organ-point is a *heavy* (long) embellishment, the Neighboring-Note a *light* (short) embellishment, and the Suspension and Anticipation result from partial *mixture* of a Chord with those which precede or follow it.

Section 1st. The Organ-point.

328. **a.** The Organ-point differs very materially from the other Inharmonic Elements, and constitutes therefore a distinct phase of "Inharmonics" by itself. As a general principle, Inharmonic notes are even more dependent, and demand resolution more urgently, than Sevenths, Ninths and other Active tones, which, though Dissonances, are at least *Harmonic*. The Organ-point on the contrary, as will be seen, is a *heavy*, *impassive* tone, which effects its "Resolution" by simply *remaining* until the other intervals return to mutual consonance.

b. The Organ-point (also called "Pedal-point") consists in sustaining a certain Scale-tone during a section of the Phrase or Period (or throughout), almost or quite *irrespective of the harmonic progressions in the other parts.*

As the latter progress from one Chord to another, and perhaps even modulate into other Keys, the sustained note must, necessarily, disagree from time to time with their Harmonies, and become *Inharmonic*.

329. The object of the Organ-point is then, obviously, to strengthen the impression of some important tone of the Scale, by prolongation; and this is sometimes done in almost obstinate disregard of the other parts.

For this reason, however, it must be a tone of such quality and importance as will endure prolongation without endangering the Harmony, namely: as a rule, *either the* **Tonic** *or the* **Dominant** *note of the principal Key.*

The prolongation of the Tonic or Dominant notes as Organ-points is justifiable on the grounds that these are naturally the most prevalent, dominating tones of the Key, and whether they are merely retained in the *mind*, as ideal prolongation of those factors from which all the relations of the Key must be determined, or are *actually held* and kept sounding in the ear, is not a matter of great difference; in fact, the latter seems the most rational course to pursue.

The following is an example of the **Tonic** Organ-point, in **Bass**:

Ex. 253.

*1) This, and the following Examples, are *continuous*, — not *single* measures. — *2 These asterisks indicate the points at which the sustained Tonic in Bass is *Inharmonic*. — *3) Throughout this meas. the *c* in Bass might be regarded as a harmonic Seventh of the Chord; but it does not impart that impression. There will be many cases of a similar kind in this Part of the book, where the distinction between Harmonic and Inharmonic intervals will need to be defined according to other indications than the *form* or *shape* of the tone-combination. — *4) Here, also, the *c* in Bass *appears* to be Harmonic (Fifth of the Chord; but its identity as Organ-point is already fully established. — *5) The Pupil should, in studying this Example at the Piano, not hold but *strike* the Organ-point, at first at each beat. By this means a more correct impression of its effect and character will be obtained.

The following is an example of the **Dominant** Organ-point in **Bass**:

Ex. 254.

Hints and Directions.

330. The Organ-point is a musical effect which is most naturally and effectively to be produced upon the Organ, by simply holding the corresponding pedal, while the hands continue the harmonic progression. Hence the terms "Organ-point", and, sometimes, "Pedal-point" or "Pedal-note". Still, it is by no means limited to the Organ, but can appear in any kind of Instrumental or Vocal music. The following peculiarities in the character and treatment of Organ-points must be borne in mind:

a. Being a tone which *enriches* rather than *embellishes* the Harmony; which aids in holding the Chords and Keys well together; and establishes a firm basis upon which the active harmonies in the other parts may move about with greater security — the Organ-point is usually placed *in the* **Bass part**, *i. e. below* the rest of the Harmony. Nevertheless, it may occasionally appear in Tenor or Alto, especially as *duplication* of the Bass Organ-point; and is even possible in the Soprano, though very rarely. In the latter case it is sometimes called an *Inverted* Organ-point, a very significant and appropriate term.

b. The Organ-point must, as a very general rule, *begin and end as* **harmonic tone** (*i. e.* as legitimate Chord-interval). And it should remain in the same register.

c. As stated in 328 b, the Organ-point is sustained irrespective of the Chords in the other parts, but there is naturally a limit to this rule. If the sustained tone becomes harshly discordant for several successive beats, or if the modulations extend into remote Keys, it will be disagréeable and wrong. This limit will be most easily determined by the *ear*. There is but little danger when the *other parts move smoothly*; when the harmonies are *simple*; and when care is taken to make the Organ-point *harmonic* from time to time, — especially on the accented beats. Still, it is a sort of prerogative of the Organ-point to conflict sometimes almost fiercely with the other parts, and its persistency seems to be a sufficient justification.

The following Example, however, is palpably wrong:

Ex. 255.

d. The length of Organ-points is optional; sometimes they extend through a whole Piece, or through large Sections, and sometimes, on the contrary, they are quite short. The difference between ordinary (long) Organ-points and short ones is very great, and will be specially considered a little later on. *Long* Organ-points should, according to the law of Rhythm, commence on a correspondingly *accented* beat. Comp. 140, last clause.

e. The Organ-point may be *held*, or it may be reiterated — perhaps in alternation with the upper or lower Octave, or with the interposition of another harmonic Interval. This will depend largely upon the instrument for which the Composition is written, and upon the degree of effect desired. See Ex. 257 and 259 b, No. 3.

f. It will be of advantage to remember that the Tonic note becomes an Organ-point in connection with *Dominant* (1st Class) Chords; and the Dominant note in connection with *Subdominant* (or 2nd Class) Chords. And both become Organ-points during *Next-related Modulations*.

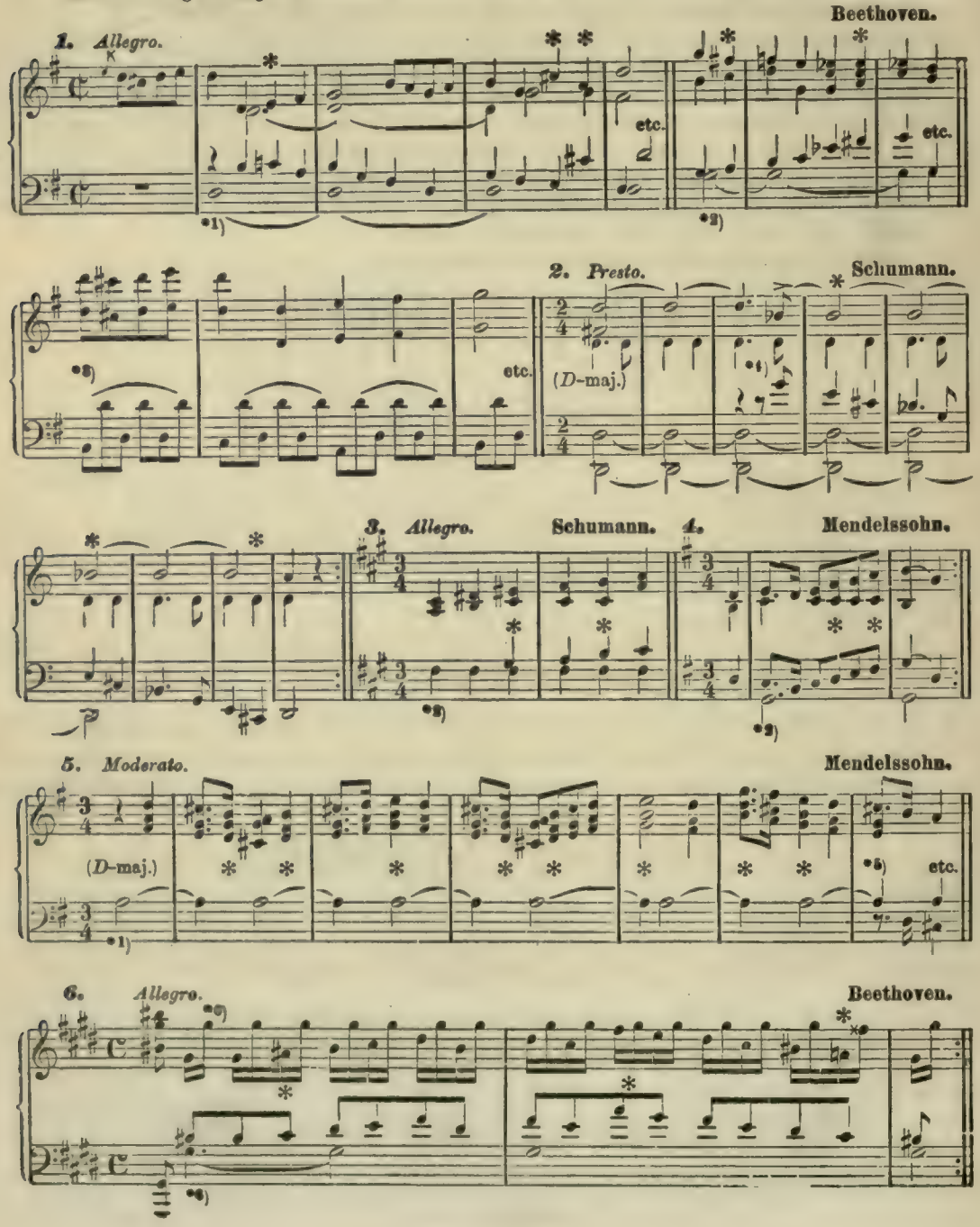
Thus:

Ex. 256.

g. The accompanying parts must move *as smoothly as possible!*

The following Example illustrates different varieties of the Tonic and Dominant Organ-points;

Ex. 257.



*1) Dominant Organ-point in Bass. — *2) Tonic Organ-point in Bass. — *3) This is the manner in which the Organ-point at *1) is reproduced later on in the Piece. — *4) Tonic Organ-point in Bass, and *doubled in Alto.* — *5) The Organ-point is transferred from Bass to Tenor. — *6) Dominant Org.-point in Bass, and *doubled in Soprano.* — *7) The Tonic Organ-point which occurs at first in Bass is afterwards transferred to the *Tenor* by simply inverting the parts and repeating the Phrase. In no way could this unusual Tenor Organ-point be more ingeniously justified. — *8) Double Org.-point in *Bass and Alto* — like *4). — *9) Double Org.-point in *Soprano and Tenor;* in the following measure, in *Bass and Soprano* as at *6). — *10) This is an extraordinary example of an Organ-point in *Soprano.* Such unique tone-combinations characterize Schumann's music. — *11) Organ-points, especially when in Bass, are often *interrupted,* as here, by intervals of the accompanying Chords

The Scholar is also referred to the following interesting Examples:

Beethoven, Sonate Op. 28, first movement, measures 1—24, *d* in Bass;
" " " " " " the last 24 measures, *d* in Bass;
" " " " second movement, measures 9—15, *a* in Bass;
" " " " last movement, measures 1—16, *d* in Bass;
the same movement, measures 25—34 *from the end*, *a* in Bass; and also the last 18 measures, *d* in Bass. — **Beethoven,** Sonate Op. 49 No. 1, the last 12 measures, *g* in Bass. — **Mendelssohn,** Sonate Op. 6, first movement, measures 18—26; last mov't, measures 44—25 *from the end*. — **Mendelssohn,** Overture "Meeresstille", measures 29—36, *d* in Soprano. —

The Pastoral Organ-point.

331. Sometimes the Tonic and Dominant notes are sustained *together*, as *Double Organ-point* in the interval of a 5th (Tonic *below* the Dominant), and almost invariably in the lowest parts.

This beautiful effect is called the "Pastoral" Org.-pt., probably because the upper parts are necessarily limited to such simple and primitive Chords and Modulations as can be associated with *either* and *both* sustained tones, without producing too harsh a dissonance. — See 330 c. e. f. g.

For illustration:

Ex. 258.

6. ***Andante.*** **Brahms.**

*1) Tonic-and-Dominant, or Pastoral Org.-pt. — *2) At this point the preceding Org.-points are *inverted* for a moment; this is *very unusual*. — *3) Here, the Pastoral Org.-pt. is produced by *one part alone* in alternating tones, and includes the *upper* Tonic also. —

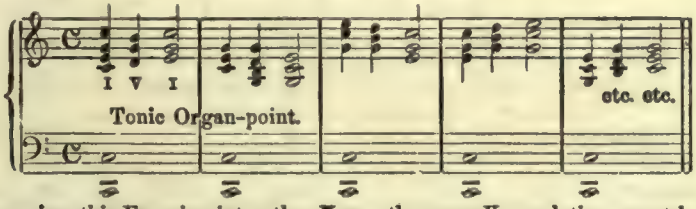
Exercise forty-eight.

Play the following Chord-progressions on the Piano, ***with the right hand***, and hold at the same time the Tonic or Dominant notes (as specified) in the ***left hand***, as Organ-points. When the Dominant is to be sustained, strike the Tonic note first, and begin the Dom. at the *second* Chord; and always *end* with the Tonic. The Organ-point may be held as octave, and should be re-struck at each accented beat. The Scholar is recommended to play the Chords not only in the given Inversions, but in as many other forms and Positions as possible; ***and they are to be played in*** **several different Keys!** **A.** With *Tonic* in the left hand: *1) I—V—I ‖ I_2—$\overset{7}{V}_3$—I_1 ‖ I—$\overset{9}{V}_0$ (altered) — I ‖ I_1—II_1—$\overset{7}{V}_2$—I ‖ *2) *C*-maj. I_1— *2)*d*-min. $\overset{9}{V}_0$—I—*C*$\overset{7}{II}_1$—$\overset{7}{V}$—I—*a*-min. $\overset{9}{V}_0$—I—*F*-maj. $\overset{7}{V}$—I—*C*$\overset{9\flat}{V}_0$—I—*G*$\overset{7}{V}$—I_2—*C*$\overset{7}{V}_3$—I_1 ‖ .

B. With *Dominant* Org.-pt.: I—I—IV—I—$\overset{7}{V}$—I ‖ I—I_2—II_1—$\overset{7}{V}_3$—I_1 ‖ I—I_1—IV—II—$\overset{7}{II}_1$—I_2—$\overset{7}{V}$—I ‖ *C*$\overset{3}{I}$—V—VI—IV—$\overset{7}{V}$—I—*F*$\overset{7}{V}$—I—*C*$\overset{7}{V}_3$—I_1—*e*$\overset{9}{V}_0$—I—*d*$\overset{9}{V}_0$—I—*G*$\overset{7}{V}$—I—*C*$\overset{7}{V}_1$—I ‖

C. With Tonic and Dominant together: $^4/_4$*3)I—| IV_1—II_1—$\overset{7}{V}_2$—I|—$\overset{7}{V}_1$—$\overset{9}{V}_0$—IV_2—I | IV_1—V—I_2— Dom. Key $\overset{7}{V}_2$|—I_1— orig. Key $\overset{7}{V}_2$—I ‖ . —

*1) The following will serve as a model for this one measure:



*2) In transposing this Exercise into other Keys, the same Key-relations must be used. — *3) A continuous 4-measure Phrase. —

Fundamental principles.

Inharmonic tones are those which lie *between* the Intervals of a Chord. —

The Organ-point is generally a sustained Tonic or Dominant note, in Bass, held almost irrespective of the accompanying Chord-progressions. —

Irregular Organ-points.

332. Although the Tonic and Dominant notes are unquestionably the best adapted to prolongation as Organ-points, other steps of the Scale can also occasionally be used in the same way. But such Organ-points are only employed for unusual effects, and therefore but rarely appear, and only when carefully and sufficiently justified.

333. The commonest and best of these irregular occurrences is

The Mediant Organ-point,

obtained by sustaining the 3rd Scale-step, which is so closely allied to the Tonic and Dominant (not only in its *harmonic* equality and relation to them as part of the Tonic Triad, but more particularly in its similar quality as *Inactive* tone — Ex. 10) that its prolongation as Organ-point is justifiable.

The Mediant Organ-point is more common in *Minor* than in Major; it is invariably in *Bass*; is usually brief; and must be associated with very simple and smooth Harmonies. The following Chords are the best:

Ex. 259a.

Illustrations of the Mediant Organ-point:

Ex. 259b.

*1) This example is taken from **Schumann's** 3rd Symphony, 2nd movement, commencing at the 4th Double-bar. It is no doubt the most remarkable illustration of the Mediant Org.-pt. that can be found. If the Scholar wishes to obtain a more complete impression than is conveyed by the above condensed and simplified version, he may do so from a 4-hand arrangement. — *2) The tone *c* in Bass is at first the *Mediant* of *a*-Minor. At *3) it becomes the *Dominant* in *F*-Maj.; at *4) it is again a Mediant; at *5) it is a short Dominant in *F*, and immediately afterwards is associated with *d*-Minor; at *6) it is again the Mediant; and at *7) it yields and proceeds into the Perf. Cadence. —

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334. **Other Irregular Organ-points** will be found in the following works:

Subdominant Org.-pt., see **Schumann,** Op. 23, ("Nachtstücke") No. 1, measure 24—21 *from the end*, *g* in Bass. This, like the Mediant Org.-pt. of Schumann (cited above), does not remain a Subdominant (of *d*-Minor) constantly, but changes to a Dominant of *C*-Maj., then back to a Subdom., and ends as Tonic of *G*-Major. — Also, **Mendelssohn,** Songs without Words, No. 27, measures 25 and 26, *a* in Soprano, in *e*-Minor. — In the same piece, measures 27 and 28, there is a Double-Org.-pt., *e* in Soprano as **Tonic**, and *c* in Bass as **Submediant** of *e*-Minor. These are both perfectly justified by the simplicity and smoothness of the middle parts (successive diatonic Chords of the 6th — see 131). — **Mediant** Org.-pt., see **Mendelssohn,** Songs. w. W. No. 25, measures 18—20, (commencing to count as usual at the first *full* measure), *C* in Bass, in *a*-Minor; interrupted as in **Ex. 257, note *11).** —

The Short Organ-point.

335. **a.** The distinction between ordinary (long) Organ-points and Short ones, hinted at in 330d, will become obvious upon comparing the foregoing Examples with those given below.

b. Short Organ-points generally extend over only *three Chords* (beginning and ending harmonic, and becoming inharmonic at the middle Chord), and therefore hardly convey the distinct impression of *sustained* tones. They are chiefly used for the purpose of avoiding unquiet or inconvenient progressions in the single parts. When any part quietly *holds* its tone, instead of joining in the harmonic succession of the other parts, the effect is rarely disagreeable, when *brief*.

c. A Short Organ-point may appear in *any part*; and it may be *any step* of the scale, — but will always be least dangerous if it is either the Tonic or the Dominant of the momentary Key. It may also occur at any part of the measure. —

The following illustrations are all taken from Mendelssohn's "Songs without Words".

Ex. 260.

*1) Short Dominant Org.-pt. (*d*) in Soprano and Bass. The Key and Chords are marked below each Example. — *2 Dom. Org.-pt. (*a*) in Alto. — *3) Subdom. Org.-pt. (*d*) in Bass. — *4) Dom. Org.-pt. (*e*) in Bass. — *5) Subdom. Org.-pt. (*c*) in Bass. — *6) Leading-tone Org.-pt. (*f*♯) in Alto. The *f*♯ is *held* instead of *resolving to g*, the note which is necessary for the I. — *7) Leading-tone Org.-pt. (*g*♯) in Alto. — *8) Leading-tone Org.-pt. (*c*♯) in Tenor, transferred to Alto. — *9) Dom. Org.-pt. (*e*) in Tenor. —

It will be observed that the Chord-progressions during which these Short Organ-points occur are of the most regular and simple kind; chiefly I — V — I. And it may be added, in conclusion, that the Passive Resolutions of Harmonic Discords Seventh and Ninth belong to the same class of musical effects, as the Short Organ-point. — Comp. Ex. 132, etc. —

Exercise forty-nine.

The figures below the Bass notes merely indicate, as usual, *which upper tones* are required. It must be left to the pupil to find the Short Organ-points, and locate them properly. — Add Original Basses, applying *all* the principles explained in this Section and introducing any variety of Org.-points. —

Fundamental principles.

Any other than the Tonic and Dominant Organ-points are irregular. —

The best irregular Org.-pt. is that upon the Mediant. —

Short Org.-points are used to obviate unquiet or inconvenient part-progressions. —

Section 2nd. The Suspension.

6. When, in any succession of two Chords, an Interval of the first Chord is prolonged until after the second Chord has appeared, so that it sounds along with the Intervals of the latter, the result is a dissonance by Suspension. Such dissonances are subject to the three following conditions, *strictly* speaking:

a. That the prolonged note be one which, in the original Chord-progression, moves diatonically (either downward or upward, but best *downward*);

b. That it immediately make this diatonic progression, as Resolution; and,

c. That it be a tone which does not *legitimately* belong to the Chord into which it is carried over. For example.

Ex. 261. *1)

*1) Here the "measures" are again *separate*, as in earlier Examples. — *2) S. signifies "Suspension". — *3) Measure 1 is the given harmonic succession. In No. 2 the Soprano note *d* of the first Chord (which has a diatonic progression) is held over into the second Chord, to which it is foreign, and in which it therefore becomes an inharmonic dissonance; during the second Chord it is *resolved* by progressing to the note which should have appeared at once, and which was displaced (deferred, or "suspended") by its prolongation. — In No. 3 a Suspension is made in the Alto. — In No. 4 there is a Double suspension in Soprano and Alto; in No. 5, in Soprano and Bass. —

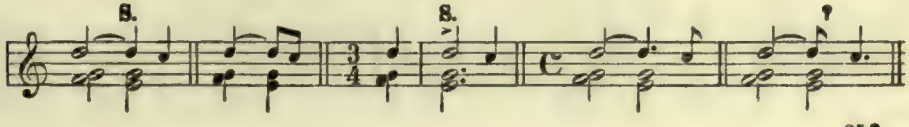
337. It is obvious, from the above, that the dissonance by suspension does not alter or in any way affect the **melodic** progression of the part or parts involved, but simply alters the **Rhythm** of the latter, by causing them to make their original melodic progression a beat or so ***later than the other parts***. The result might therefore aptly be termed **"Oblique Rhythm"**, because one of the otherwise perpendicular lines of the original simultaneous tones is ***bent forward*** by the delayed progression in the part which contains the Suspension. Thus: the perpendicular tone-lines in measure 1 — | | are bent, in the 2nd measure, to | / by the S. in Soprano —

Hints and Directions.

338. a. Suspensions may occur in any part, but are most common in the *Soprano*. They are also excellent in either middle part, but somewhat indefinite and dangerous in Bass. —

b. The ***length*** of a Suspension is optional; generally it is just ***half the value*** of the Chord into which it extends. It may be ***more***, but very rarely ***less*** than this. Thus:

Ex. 262.



c. The Suspension may be *tied* to its preparing tone (*i. e.* the preceding tone), as in Ex. 261; or it may be re-struck, as in Ex. 262, meas. 3. — In the latter case it is more emphatic and effective. In Organ music it is usually tied.

d. It is apparent that the Suspension must always appear *on the* full *fraction of the beat, usually on the Accent;* and that its Resolution is invariably *less* accented. —

It may stand on the 2nd beat in *Triple* time, if resolved on the 3rd beat, which is weaker. Ex. 263a. —

e. The Suspension and its resolving-tone (called the "Suspended tone" or "Displaced tone") should not, as a rule, appear simultaneously, — in different parts, of course. Especially not, when the Suspended tone is a sensitive Interval (Leading-tone, Mediant, etc.) which will not readily admit of duplication in any case; and under no circumstances in two *adjacent* parts. The *Bass part* is usually exempt from this rule. For example:

Ex. 263.

*1) The Susp. *f* (in Sopr.) and its resolving-tone *e* (in Alto) appear together. This is palpably incorrect. — *2) When the conflicting tones are further apart, the error is less disagreeable, but still inadmissible when, as here, a note is involved (*e.* the Mediant) which should not be doubled in any case. — *3) The error which this rule aims to prevent is the inconsistency of deferring a note *in one part*, by means of a Suspension, and neglecting to do so with the same note *in another*. Therefore the blunder may easily be avoided, either by *not doubling* the note which is to be suspended, or by suspending it *in both parts*. — *4) This is good, firstly, because the *Tonic* note is involved (which may be doubled without hesitation), and secondly, because the duplication occurs in *Bass*. — *5) Also good, as the Suspended note is the *Tonic*. — *6) Suspended *Dominant*. —

Additional illustrations of the Suspension:

Ex. 264. *1)

*1) Again *continuous* Examples. — *2) At each of these lines the rule given in 338 e is *intentionally* violated. —

Harmonic Suspensions.

339. It is not absolutely necessary that the tone which is prolonged in this manner from one Chord over into the next, should become an *Inharmonic dissonance*, as stated in 336 c. Very often the prolonged note *agrees* with the Intervals of the following Chord, so that they together assume the *appearance*, at least, of a Harmonic body. When this is the case the prolonged note is called a "Harmonic" Suspension; and it will nevertheless produce the *effect* of an ordinary Inharm. Susp., if the apparent "Chord" does not conform to the harmonic progression which is expected or required. For illustration:

Ex. 265.

*1) The 2nd Soprano-note *b* appears to be a Fifth of the Triad III; but this Chord, besides being unusual in any connection, is out of the question here, where the I is *required*, as Resolution of the preceding V. This *b* must therefore, *although not inharmonic*, be regarded as a Suspension; *i. e.*, as a tone which is prolonged beyond the first Chord for the sole purpose of deferring or suspending the next note, *c*. This is another proof that the underlying principle of Suspensions is that of *Rhythm* ("Oblique Rhythm", 337), and not

merely of melodic succession, or inharmonic combination. — *2) This appears to be a $\overset{7}{\text{III}}$; but see Ex. 161, note *1). — *3) Appears to be a $\overset{9}{\text{VI}}$, and is therefore more plausible than *2). But it *sounds* more like a Double-susp. than like a Chord. — *4) *5) Appear to be Chords of the 6th. — *6) All $^6/_4$ Chords, when used in this connection, partake very largely of the nature of Suspensions. — *7) Looks like a $\overset{9}{\text{I}}$ — an impossible "Chord". — *8) Looks like a $\overset{9}{\text{IV}}$; also impossible. — *9) *On the contrary*, these Soprano notes (*g* and *c*) are *not* Suspensions, because they represent Chords of undoubted identity.

Suspension-Chords.

340. a. Analogously, a **whole Chord** may be prolonged from an *unaccented* beat to the following Accent, in such a manner that the expected (accented) Chord is *obviously* deferred for a beat or so. See Ex. 266. This occasions, of course, a **Rhythmical Halt** (65 b, 221 No. 2); but an *intentional* one, which will be harmless if effected in such a manner that *the intention is obvious!*

b. It must be clearly understood that the "Rhythmical Halt", which arises from a neglect to *change the Chord* at the Accented beats, is simply a violation of the **harmonical** accentuation (4 a, and has only been deprecated heretofore because this mode of accentuation is probably the most natural and the *strongest*. But, as shown in 4 a, it is not the *only* means of defining the Accents, and, therefore, its violation does not inevitably result in complete confusion of the rhythm; it is only necessary to apply the *other* accentuations all the more emphatically, in order to define and re-establish the correct rhythm, in spite of the false harmonical accentuation.

c. A misconception of the rhythm, which is apt to ensue in this case, must therefore be averted by such means as serve to denote, unmistakably, the location of the accented beats, namely: by strong *Metrical* or *Dynamic* accentuations; by close connection with measures in which the rhythm is correct; and by analogous and symmetrical arrangement of the Members of the Phrase, as in Sequences and the like.

Such prolonged Chords may be termed "Suspension-Chords". For illustration.

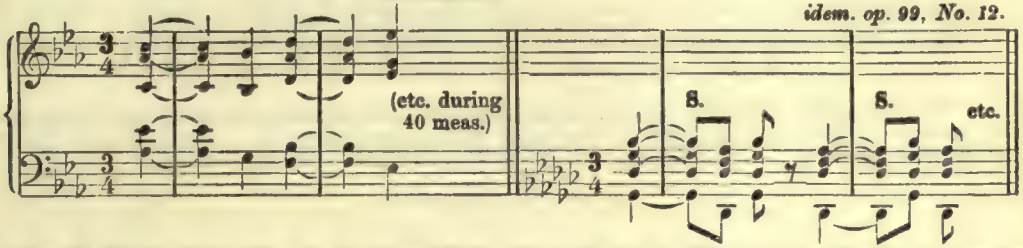
Ex. 266.

*1) A "Susp.-Chord", repeated from the preceding measure. The correct rhythm is defined by the symmetrical agreement with the Metrical Accents (heavier notes) on the 1st and 3rd beats of the meas. before. —

*2) At these Susp.-Chords the rhythm is endangered more than usual, by the *Ties*, which completely stifle the Natural Accents. But the heavy metrical accentuations in Bass effectually re-establish the rhythm. — *3) Here the fundamental rhythm is marked by the Dynamic accentuations (*sf*), and also by the *Slurs*, which indicate what notes *constitute a beat together*. — See also, Ex. 203, No. 1; and Ex. 214, No. 8.

Schumann, as a rule, takes but little pains to preserve the fundamental Rhythm, as the following extracts prove.

Schumann. *idem. op. 99, No. 12.*



See, to the contrary: Schumann, "Bunte Blätter" Op. 99, No. 11, Trio; and Op. 99, No. 12, measures 5—7; 9—11; 16; 20 etc. —

Exercise fifty.

A. Basses, to be worked out and analyzed as usual, marking each Susp., and defining the Chords accordingly. The Scholar is recommended to *tie* every Susp. to its preparing-tone (338 c).

*1) These slurs before the Bass figures signify that the first Bass note is a Susp., and therefore the upper parts are to take, at once, the Chord indicated by the *following* figures. — *2) Rhythm ♪ ♩ or ♩ ♪; the latter is the best. — After working out B and C, add Short Original Basses.

B. The following plain Chord-progressions are to be furnished with Suspensions *on the first beat of each measure*, as follows: 1. in Soprano alone; 2. in Tenor alone; 3. in Alto alone; 4. in any two parts together; 5. in all three upper parts; 6, 7 and 8, in *alternating (single)* parts, occasionally including the Bass. First review 336 a, b, and Ex. 261. This Exercise may be first written out and then played; or it may be made *at sight* at the Piano.

*1) These unequal consecutive 5ths are completely divested of their disagreeable effect when a Susp. is used in *any* of the parts. See Appendix A, c. — *2) In this measure a Susp. may be made at *each* beat, as ♪-note. — *3 It is not advisable to defer the Cadence-note in the *Soprano* with a Susp.; in the middle parts it is allowable. —

C. Play the following Chord-progressions, at sight, *with a variety of Suspensions*, and in every Major and Minor Key: $\overset{8}{I}$ — $\overset{7}{V}$ ‖ $\overset{8}{I}$ — $\overset{7}{V_2}$ ‖ $\overset{7}{V_1}$ — I ‖ $\overset{7}{V_3}$ — I_1 ‖ I — IV ‖ IV — I ‖ I — $\overset{9\flat}{V_0}$ ‖ $\overset{7}{V}$ — VI ‖ .

Fundamental principles.

The Suspension is a tone which does not belong, legitimately, to the momentary Chord, *but to the* preceding *one.*

Suspensions are resolved diatonically, downward or upward.

Suspensions chiefly affect the Rhythm.

They always occupy full beats (or accented fractions).

They must not necessarily be inharmonic.

The Rhythmical Halt may easily be counteracted by Metrical and Dynamic accentuations.

Irregular Resolutions of the Suspension.

341. In order to be absolutely strict and distinct, a Suspension should resolve itself ***at once***, during the beat in which it occurs, and, consequently, before the Harmony can change (as was seen in the foregoing Examples). But this rigid treatment is by no means obligatory. Very beautiful and justifiable effects can be produced, ***by*** **changing** ***the Harmony at the same moment that the Suspension resolves itself.*** This simply involves a progression in one or more of the other parts, simultaneously with the progression of the Susp. into its resolving-tone.

342. The rules of this very common irregularity (which may be termed the "**Delayed Resolution**", because the Resolution occurs in the 3rd Chord, instead of in the 2nd), are as follows:

a. The Suspension can not evade its Resolution, but ***must*** progress diatonically into its original Resolving-tone Consequently,

b. The other parts must progress into some Chord which contains this Resolving-tone. This will be, most naturally, some *new Inversion or new form* of the original Chord itself; but it may also be a *new* Chord, of the *same*, or even of *another* Key.

Ex. 267.

*1) The Bass and Alto make a progression at the same time that the S. in Soprano makes its Resolution, by which means the Chord *changes its Inversion.* — *2) The Bass moves, and changes the *Concord* V into the *Discord* $\overset{7}{V}$, during the Res. of the S. — In the following meas. it is changed into a $\overset{9}{V}_0$. — *3) Here, the *arrangement* of the Chord is simply altered, by exchanging Tenor and Soprano. — *4) In this meas. the progressions in Bass and Tenor result in a change of the original Chord I into its Relative, the VI; but the Res. of the S. in Soprano is not interfered with. — *5) The resolving-tone of the S. in Alto becomes a *Seventh!* This is unique, but perfectly justifiable. The Parallel fifths in the Middle parts are not wrong, because the first one embraces a *Suspension*, and is therefore *not harmonic*. The rule only applies to fifths which are **Perfect** and **Harmonic**. — *6) The progressions in Tenor and Bass change the Key; this is allowed if effected smoothly and without interfering with the Res. of the S. — *7) Here the change of Key is almost too great. — See Appendix C. —

343. Two other Licences may be mentioned in connection with the above "Delayed" resolution, which they closely resemble, and of which they are in reality merely a more extended form, namely:

a. The **Prolonged** Suspension. In this case the S., instead of resolving ***before*** any other progression takes place (as in Ex. 261), or ***during*** the progression of the other parts (as above, Ex. 267), is extended **beyond** its natural resolving-beat, so that the other parts move ***during its prolongation:*** See Ex. 268 a.

b. The **Passive Resolution.** Here, the Suspension is extended beyond its resolving-beat, exactly as at **a.**, but the other parts progress in such a manner that the Susp. ***becomes Harmonic***: See Ex. 268 b. The term Passive Resolution is applied to this Licence, in analogy with Ex. 132, to which it is a parallel case.

N. B. In none of these cases can the ultimate diatonic Resolution of the Suspension be evaded.

Ex. 268.

*1) The Susp. *d* in Soprano is prolonged past its own beat into the 2nd beat, and resolved in the 3rd. — *2) The Susp. *c* in Tenor is extended into the 2nd beat, and becomes Harmonic at that point (Root of the I) by the progression in the Soprano. — *3) This is a mode of embellishing the Perf. Cadence, which is very common in Haydn, Mozart, etc. — *4) The *c* in Soprano, which becomes casually a Susp. on the 3rd beat, makes the impression of an Org.-point, by its unusual length. — *5) The Bass makes *two* progressions, before the Suspensions are resolved. —

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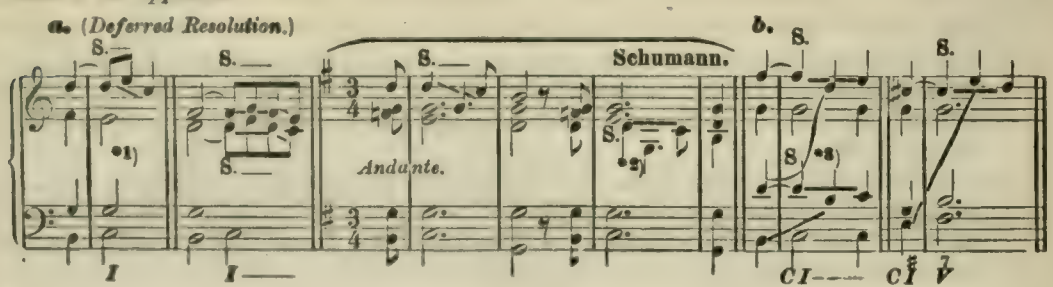
344 **a.** The Resolution of a Suspension may be **Deferred,** exactly like that of the Dominant Dissonances (Ex. 131 a), by ***interposing any convenient Interval of the Resolving chord,*** between the Susp. and its Resolving-tone, or between the Susp. and its repetition: Ex. 269 a.

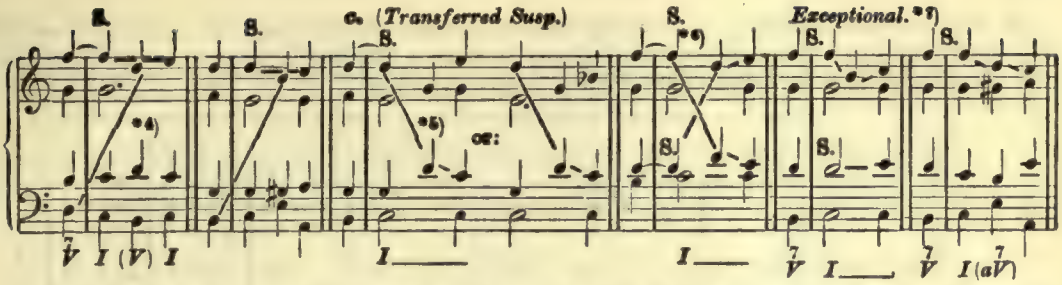
b. It is also possible to interpose an Interval of the *preceding* Chord; but it is more dangerous, and more difficult to justify. In this case the interposed tone may be harmonized independently Ex. 269 b.

c. Finally, the Suspension may be **Transferred** to another part (like the Dissonance in Ex. 131 b) when the Chord remains *the same.* And Double or Triple Suspensions may **exchange parts.** Ex. 269 c.

d. In all of these Licences, the Suspension should be ultimately resolved, in the register (Octave) where it *last appeared!*

Ex. 269.

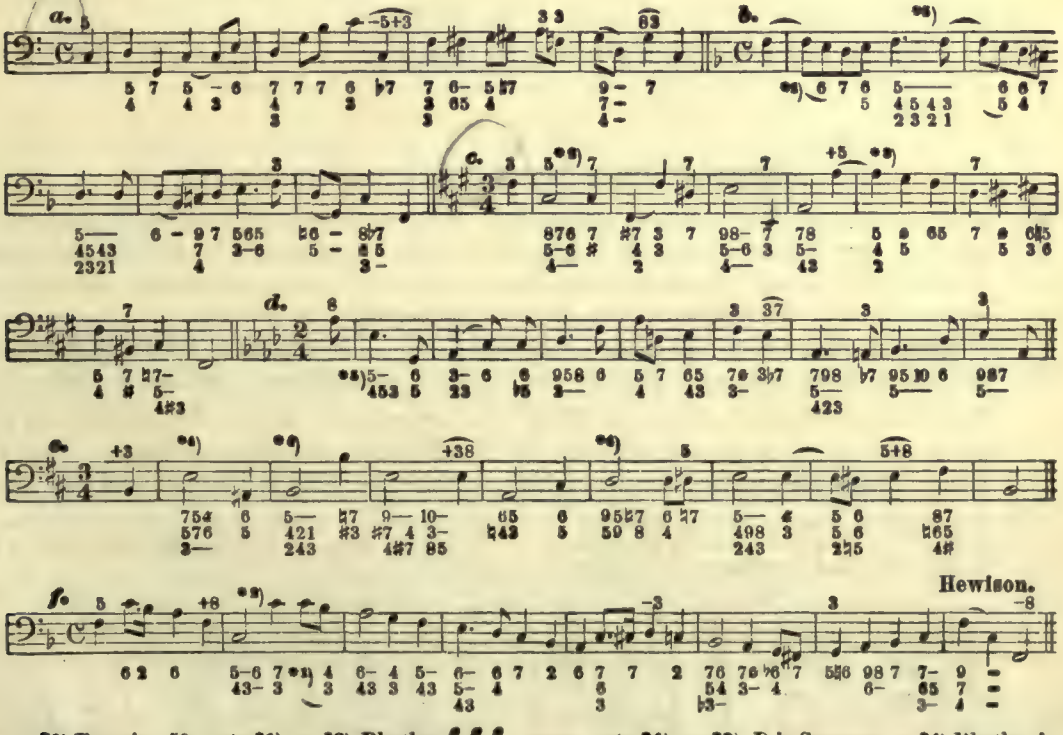




*1) The Resolution of *d* in Soprano is deferred by *e*, the Third of the Resolving-Chord. — *2) The same Deferred Susp. that appears two measures before in Soprano. — *3) The Suspensions *f* and *d* are deferred by *d* and *b*, Intervals of the *foregoing* Chord. — *4) Here, the interposed tone, out of the preceding Chord, is reharmonized, as independent beat. — *5) The Susp. is transferred to Tenor, and resolved there. — *6) The Suspensions in Sopr. and Tenor change places. — *7) These measures are both exceptional, because the Res. of the Susp., after being Deferred, is *evaded* altogether. Comp. 195 c. —

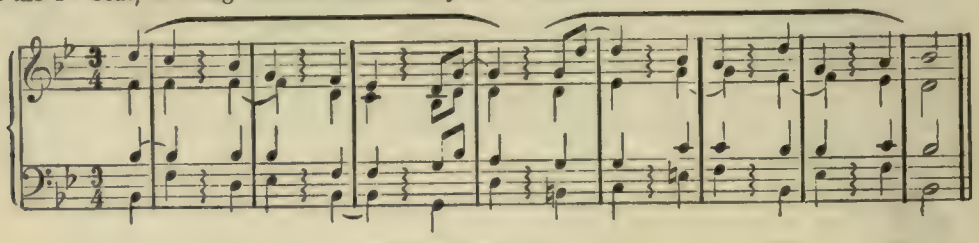
Exercise fifty-one.

A. Basses, to be worked out and analyzed.



*1) Exercise 50, note *1). — *2) Rhythm : comp. note *4). — *3) *D* in Soprano. — *4) Rhythm in these measures, exceptionally : See Exercise 19, note *3). — *5) The groups of figures which belong to one single Bass note exactly denote the *course* of the parts. — Add Short Original Basses. —

B. The following Period is to be completed, by filling in the 2nd beat of each measure, *according to Ex. 267; i. e.*, one or more of the parts must make a progression at the same time that the Susp. (on the 1st beat) is being resolved diatonically downward.



Fundamental principles.

The other parts may make a progression into another form of the *same* Chord, or into a *new* Chord of the same or of a different Key, at the same moment that the Suspension is being resolved. —

The Resolution of a Susp. may be Deferred by interposing any convenient tone of the resolving Chord, or (rarely) of the preceding Chord. —

The Susp. may be transferred to another part. —

In any case the Susp. should be resolved where it is last heard. —

Irregular Introduction of the Suspension.

345. a. The Susp. is defined in 336 as a tone which is *retained from the preceding Chord*. This does not imply that it must necessarily be joined with a Tie, (or re-struck) at the *very place* where its preparing-tone occurs. On the contrary, Suspensions are more conspicuous, graceful and effective when, instead of this *strict* treatment, they enter *without direct preparation*.

Thus, a tone which appeared in a lower part may re-appear in the following Chord as Suspension in the Soprano, entering with a *skip*, or *diatonically*, as the case may be. Or the Susp. may represent an Interval which does not actually appear in the preceding Chord, but is *understood*, as *possible Seventh*, or (if sufficiently plausible) as *possible Ninth* of the latter. This irregular Introduction is best in Soprano, though admissible in any part. —

b. It is merely necessary, then, to prove that the foreign tone is, or might be, a harmonic Interval of the foregoing Chord; and this can easily be tested by *anticipating* the Susp., as shown by the small notes in parenthesis, in the first 2 measures of the following Example.

Ex. 270.

*1) The Susp. *d* in Soprano enters without preparation, with a skip from *b*. The preparing-tone lies in the Alto, on the preceding beat: Comp. Ex. 261, measure 2. — *2) The Susp. *f* in Soprano does not appear in the preceding Chord at all, but is understood, as *Seventh*. In the following measure it is an understood 9th. — *3) The Susp. in Sopr. enters *diatonically*, instead of with a skip. — *4) The Susp. *c* in Soprano is a possible Seventh of the preceding II. This is less plausible than *2). — *5) As Seventh of the IV ("Ninth" of the II) the Susp. is difficult to recognize. — *6) When the Susp. is an understood Seventh, it (the Seventh) should not appear in the foregoing Chord, unless the *whole Chord* is prolonged (as in measure 6). —

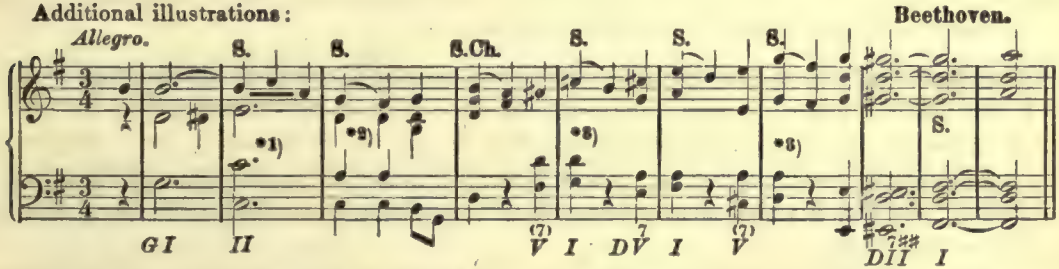
346. **a.** Sometimes the preparation of a Susp. is ***intercepted*** by some other Interval of the same Chord. — And

b. the Susp. may be a ***chromatic alteration*** of the preparing-tone, — but only in the ***same part.*** This is rare, but good. For example:

Ex. 271.

Additional illustrations:

Ex. 272.



*1) The Resolution of the Susp. *b* (in Sopr.) is deferred by the interposition of *c*. — *2) The Susp. *g* is a possible 7th of the preceding Chord (II). — *3 These Suspensions are also 7ths of the foregoing Dom. Chords. — See **Mendelssohn:** Songs without Words, No. 2, measures 33, 37, 39; No. 3, measures 2, 3, 7, 10; No. 18, measure 4; No. 19, measure 5; No. 20, measures 3, 11, 18, 19; No. 26, measures 6, 10, 11. —

Exercise fifty-two.

*1) The Suspensions may be introduced strictly, as before, or irregularly as shown in Ex. 270. The choice is left to the Scholar, but preference is to be given to the *free* introduction. — *2) Suspensions strict. — *3) Suspensions all irregular, and chiefly in Soprano. — *4) Exercise 50, note *1). — *5) The Ch. of the 7th falls on the *first* beat. — *6) It is not impossible for a Phrase to end thus in the Pos. of the Third. Such Perf. Cadences are called "Incomplete". — *7) Melody-notes. —

The Harmonizing of Melodies.

347. The treatment of certain tones of a given Melody as Suspensions, may be obligatory or optional, according to circumstances. The rules are as follows:

a. Only an *accented* beat (or the accented fraction) may be regarded as a Suspension (338 d); and

b. Only such tones as *progress diatonically* (as Resolution of the Suspension).

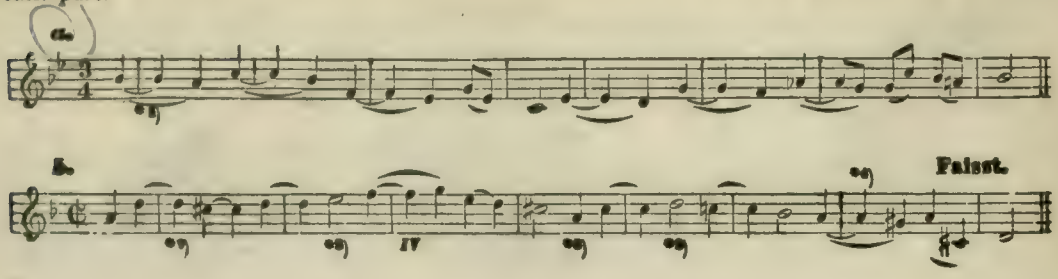
c. If the accented tone which progresses thus is *tied* to, or repeated from, the *preceding* tone, there is every reason to suppose it to be a Suspension with regular preparation; but,

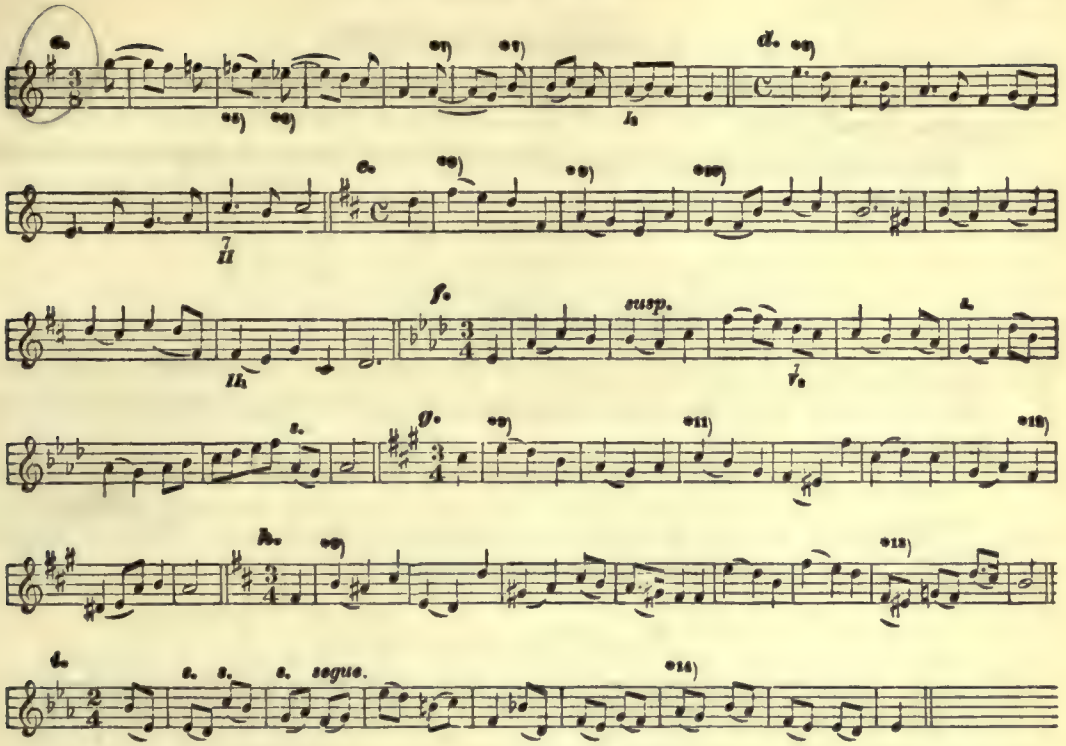
d. Even when such a tone enters with a *skip*, it may be a Suspension with irregular introduction (as above).

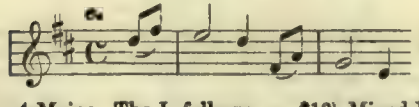
e. The principal guides will be: the natural or necessary order of Chords; and the character of the Melody.

Exercise fifty-three.

Melodies, to be harmonized with occasional Suspensions in the given Soprano, or *in any other part*.





*1) Each of these tied notes may be a Suspension (347 a, b, c). In order to become such, it must be ignored (as Inharmonic tone) and the following *tone must be harmonized in its place*, as if the Melody were simply thus: etc. — and etc. — The pupil may, if he chooses, first harmonize the whole Melody in this simple form, and add the Suspensions afterward. — *2) This tone becomes a Susp. on the 3rd beat. It is clear that this measure only differs from the others in *notation*. — *3) See Exercise 34, note *9. — *4) May be *a*-Minor, or a Mixed Chord of *d*-Minor. — *5) It does not matter, of course, whether the tone is tied or re-struck, over the Accent. — *6) *G*-Major. — *7) Modulations at option. — *8) Melody originally: etc. — *9) At these (and other) points, the Suspensions may be irregularly introduced. See 347 d, and review 345 b. The 2nd note of the slurred group is harmonized on the *1st beat*, and the 1st note *must belong to the foregoing Chord*, whose choice it therefore determines. The 1st two measures of this (5th) Melody were then, originally:  etc. — *10) *B*-Minor I. — *11) *F*♯-Min. IV. — *12) Altered $\frac{7}{II}$ of *A*-Major. The I_2 follows. — *13) Mixed $\frac{7}{IV}$ of *b*-Min. — The I_2 follows. — *14) *E*♭-Maj., *A*♭-Maj., or *f*-Minor. — Harmonize also Melody *h* of Exercise 33; and Melody *g* of Exercise 34.

Fundamental principles.

A Susp. is a tone which must belong to the preceding Chord, whether it enters by preparation or with a skip. —

Almost any *accented* Melody-note which progresses *diatonically* may be harmonized as a Suspension. —

Section 3rd. The Anticipation.

348. The Anticipation is exactly the opposite of the Suspension, and consists, as the term implies, in a tone which does not belong (legitimately) to the momentary Chord, but to the following one.

It is much more uncommon and dangerous than the Suspension, because it is difficult and unnatural to accept a tone *before its time*. Therefore it is limited in its uses It occurs most frequently· 1stly, at **Cadences;** and 2ndly, in **Sequences** and the like, where one Anticipation appears to confirm and justify the other. For example:

Ex. 273.

*1) **Ant.** or **A.** signifies Anticipation. — *2) This *c* does not belong to the Chord with which it appears, but to the *following* one. A similar Ant. may be made in Alto, as shown by the notes in parenthesis. — *3) Any series of Chords may be embellished (in any part or parts) with Anticipations, as shown here. — *4) Here the Anticipations (in Bass) are *tied* to the anticipated tone. This injures the rhythm very much, and is only comprehensible in rapid tempo. — See also

Bach, 48 Fugues and Preludes, Book I, Fugue No. 14, measures 8, 9; 15, 16; 19, 20; 21—24 (Bass); 35—38. — **Beethoven,** Op. 49, No. 2, 2nd movement, first measures. —

Hints and directions.

349. a. Anticipations are most intelligible in Soprano, but are possible in any part.

b. The Ant. should never exceed in duration *half* the value of the Chord in which it occurs; the shorter it is, the more easily it will be recognizable as a foreign Element, and the less it will endanger the rhythm.

Ex. 274.

c. Anticipations differ from Suspensions in their rhythmic location, being always found upon *unaccented* beats, or weak fractions of beats, whereas Suspensions occupy *accented* beats, or accented fractions (338 d).

d. Anticipations are generally re-struck; seldom *tied* to the Anticipated note. Ex. 273, compare *c* with *b* and *d*.

e. An Anticipation may be introduced from *any* lower or higher tone. As it pertains exclusively to the tone which *follows*, its introduction is of no consequence.

Harmonic Anticipations.

350. Anticipations may be *Harmonic* as well as Suspensions. If a tone bears a closer and more legitimate relation to the following Chord than to its own, and, especially, if it is comparatively *short*, it will produce the impression of an Ant., whether it is inharmonic or not. And, on the same principle, the *whole following Chord* may be anticipated. Review 339, 340.

Harmonic Anticipations are preferable to inharmonic ones, because they *sound* better, and disturb the harmonic sense less than the latter

Ex. 275.

*1) This c might represent the IV, and almost surely would, if it were not so *brief*. — *2) The *f*, as half-beat, is a legitimate Seventh; but its relation to the following tone gives it the appearance of an Anticipation. — *3) Anticipating-chord. In these two Phrases, the 2nd Chord of each beat is an Ant. of the following beat.

351. When, as here, a Chord is repeated over the bar (or Accent) in violation of the rule of ***harmonical accentuation*** (4 a), it may be difficult, or even impossible, to determine accurately whether the first Chord is an Anticipation of the second one, or the second a prolongation (as Suspension) of the first. (The tied notes, in the right hand *alone*, in Ex. 266, No. 2, may be analyzed in either way). In cases where there is the least doubt, it ***does not matter how*** they are construed. The main (and essential) requirement is: to define the fundamental **beats** so clearly that no misapprehension or confusion of Rhythm can possibly result. This matter is explained in 340 b and c, which review. The following is an interesting and simple example of both cases in succession:

Ex. 276.

352. There is no doubt of the following examples being Anticipating-chords, principally on account of their brevity. They might aptly be termed "***Rhythmic*** Anticipations", as they do not affect the fundamental Harmony in the least:

Ex. 277.

See Ex. 282, Mozart, measure 3. —

Syncopation.

353. Syncopation is the term applied to that kind of irregular Rhythm in which the *longer tones* occupy comparatively *weaker* beats, or, more specifically, fall *between* the beats. It is simply a violation of the Metrical accentuation (see 4 a, b), and results from *tying an unaccented beat, or* fraction *of a beat, to the following accented beat, or full beat.*

It is the most perspicuous example of **"Oblique Rhythm"** (337), because the syncopated part or parts are literally bent forward or backward so as to differ (by a beat, or fraction of a beat) from the other parts, which mark the ***regular*** Rhythm.

354. Whether the syncopated notes, when they fall exactly ***between*** the beats, are Suspensions or Anticipations, depends of course upon which way they were "bent"; that is, whether they belong to the ***following*** or ***preceding*** Chord. Sometimes, as stated in 351, they can be accounted for in either way, and, as a rule, it is quite unnecessary to consider this doubtful question at all. The notes can be produced, and defined, simply as "Oblique Rhythm", or "Syncopation". In the following Example the distinction is very plain at *a* and *b*:

Ex. 278.

*1) These syncopated Soprano notes, which fall exactly between the beats, belong to the Chord which *precedes*, and therefore become Suspensions. — *2) Here the very same notes, owing to an alteration in the location of the Chords, are Anticipations of the *following* beat. The direction of the Oblique Rhythms is indicated by the slanting lines. — *3) The syn. notes in the "left hand", being struck *after* their beat, become Suspensions. — *4) Piano-Sonata, Op. 2, No. 3, 1st movement; see also, measures 11, 12 (Bass); also *from the Double-bar*, measures 26, 27; 30, 31; 34—37; 58—65. —

355. Upon this principle of Oblique Rhythm in one or more parts of the Harmony, very unique effects may be produced. For instance, any two parts of the Harmony (the two hands in Piano music and the like; or one voice against the other three; or the Melody against the Accompaniment, etc. etc.) may appear ***successively***, instead of simultaneously (Ex. 279 a, b, c). Or the Chords may be "broken" ("arpeggioed", — as in Figuration) across two beats or rhythmic groups: *i. e.* partly in one and partly in the next. For illustration:

Ex 279.

*1) At *a*, *b* and *c* the Harmony is divided between the two hands, which strike alternately, instead of together. This does not affect the Harmony at all, but simply the *Rhythm*, which it makes "Oblique", as indicated by the slanting lines. — *2) Variations sérieuses, Op. 54, Finale; see also Var. 5, 11, 15. — *3) These Rests remove the *appearance* of Syncopation, but it is clear that they merely take the place of *Ties*. Thus:

See also: **Mendelssohn,** Op. 72 No. 6, measure 3—5, 11—13 etc. And Ex. 296, No. 3. — *4) These Eighth-notes, with connected stems, should occupy a beat together, instead of lying across the bars (or beatlines). The heavier Bass tones define the Rhythm. — *5) The left hand here, is like the right hand at *4). This example is from Schumann's "Carneval" ("Paganini"). See also his "Fabel", Op. 12. — *6) The connected stems define the "broken" Chord; the brackets define the half-measure groups. Their disagreement is somewhat similar to *4). — See further:

Schumann, Phantasie Op. 17, 1st movement, measures 95, 96; 105—118 (Bass); 2nd movement, measures 22—25 (Soprano; 62—65 (Bass); also the last 28 measures of the same movement; 3rd movement, measures 27, 28. — **Schumann,** Op. 6, No. 4.

NB. *These oblique rhythms are only intelligible and effective in* **rapid tempi,** *where the conflicting harmonies are of but short duration!*

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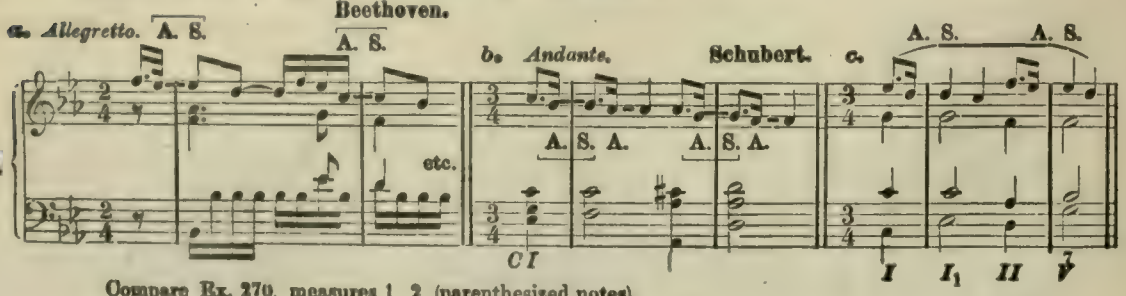
356. The Anticipation sometimes merely serves to prepare a Suspension. In such cases the Ant. is generally *harmonic*, but not necessarily so. For example:

Ex. 280.



Compare Ex. 270, measures 1, 2, (parenthesized notes).

Exercise fifty-four.

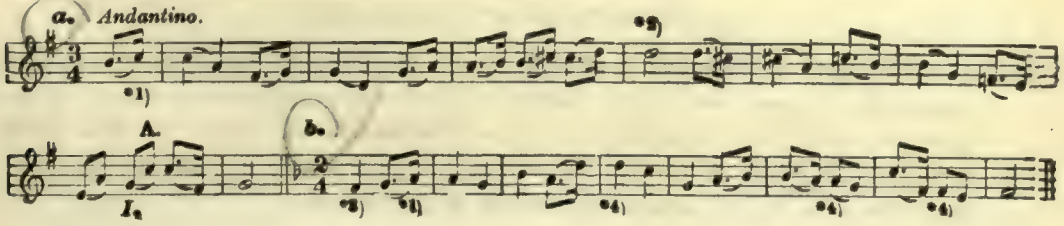
A. The following Chord series (in Period-form):

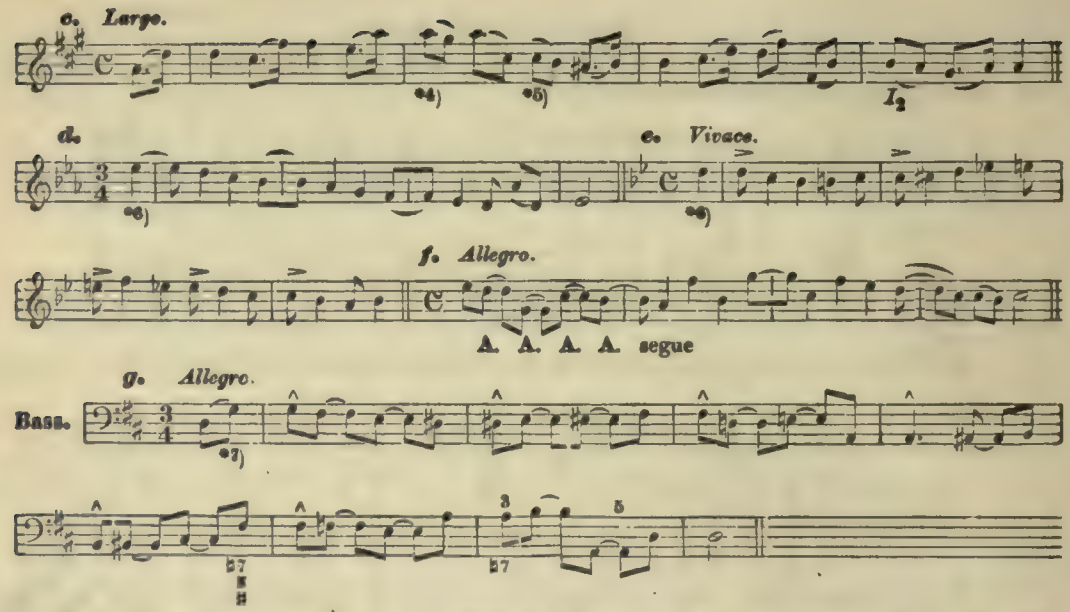
Ex. 281.

is to be elaborated with Anticipations in the following ways (at the Piano, at *sight*; or as *written* Exercise):

*1) It is by no means unusual to add supplementary notes here and there, as in these last two Chords, and the Scholar may hereafter practice this licence of *altering the volume* of the Harmony (either by additions or by *omissions*), wherever his taste and judgment suggest. See 413. — *2) Ex. 274, measure 2. — *3) Ex. 275 d. — *4) Ex. 273 c. — *5) Ex. 279 b. — *6) The 3 upper parts may be written in a group upon the upper staff, as here, wherever desirable. — *7) Ex. 279 d.

B. Melodies, with Anticipations, to be harmonized as usual.





*1) All of these short notes (♪) must be harmonized as Anticipations. *i. e.* they are simply to be ignored altogether, because they *do not belong to the beat in which they occur*, but to the following one. — *2) *D*-Maj. or *b*-Min. — *3 Comp. Exercise 32 B, Melody *e*. — *4, 347 c, and 356. — *5) Semicadence. — *6 These two Melodies are to be harmonized in two ways: 1stly, so that the syncopated notes will be *Suspensions* (on the heavy fraction of the beat); and 2ndly, so that they will be *Anticipations* (on the weak fraction). The difference is explained in 354, and Ex. 278 a, b. — *7) The weak fraction of almost every beat is to be an Anticipation. The 3 upper parts may be placed together on the upper staff, as at Ex. 281, c (note *6).

Fundamental principles.

The Anticipation is an Inharm. tone (or possibly Harmonic) which belongs to the following Chord.

Anticipations are always unaccented; generally very short.

Syncopation is a violation of the *Metrical* accentuation.

Anticipations may merely serve to prepare Suspensions.

The Irregular Anticipation.

357. The **Irregular Anticipation** is the opposite of the Irregular Suspension, and is so called because it *progresses with a skip*. instead of justifying its inharmonic nature by *remaining* upon the note which it anticipates. The Anticipated note appears in some other part; or it is *understood*, as possible Seventh (or Ninth?) of the ensuing Chord.

a. This licence is limited almost exclusively to the Soprano.

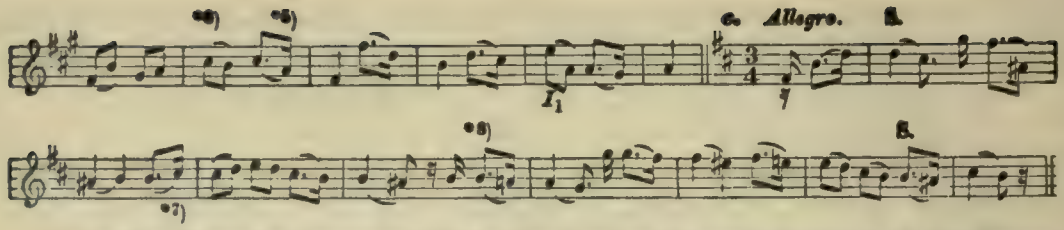
b. The Anticipation should skip *downward*, as a rule. — Compare 345 a. — For example:

Ex. 282.

*1) This mode of treating the Anticipation, although a licence, is preferable to the strict treatment. The skip is much more graceful than the repetition, as in Ex. 273. — *2) The skip *upward* from the Irreg. Ant. is exceptional. — *3) The Irreg. Ant. in *Bass* is very unusual and difficult to justify. —

Exercise fifty-five.

Melodies, with Irregular Anticipations.



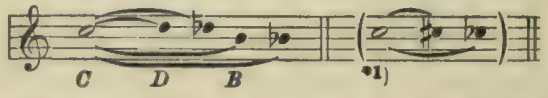
*1) The slurred notes are harmonized with one Chord, so that the second fraction of the beat becomes an Anticipation. If, as here, it skips away, the *next Chord* must contain it (357). As if the Melody were thus

*2) *F*-Minor, $\frac{6}{4}V_0$. — *3) Each $\frac{6}{5}$ is an Irreg. Ant. — *4) This Melody is to be harmonized twice: first in *B♭-Major*, and then in *b♭-Minor* with the upper Accidentals. — *5) In order to produce a genuine (inharm.) Anticipation, this beat must be harmonized with some Chord to which the *second tone is foreign*. — *6) Semicadence. — *7) 356. — *8) *G*-Major. — **Add Short Original Phrases.**

Section 4th. The Neighboring-Notes.

358. Every Harmonic Interval is attended by four Neighboring tones, consisting in the ***next higher and lower Letters***, in their notation as ***whole-step and half-step***. Thus:

Ex. 283.



1*) The Neighboring-tone can not be *chromatic*, because the *Letters* must differ. See 290 a.

359. The Neighboring-tones may occur in almost any connection with their own harmonic Interval (Principal tone) as **Unessential or Embellishing notes.** They may be divided into two Classes: 1stly, as simple embellishments or "Neighboring-notes" proper, and 2ndly, as "Passing-notes".

The Neighboring-note as "Local" Embellishment.

360. The term "***Local***" embellishment may be applied to those cases in which no other harmonic Interval is involved than the one which is being momentarily embellished; in other words, in which the Neighboring-note ***returns*** to the same Prin. tone from which it proceeded. Compare 364 a.

361. All the common forms of Embellishments or "Grace-Notes" (the Turn, Trill, Appoggiaturas, Mordent, etc.) are based upon the association or ***alternation of a Principal tone with one or another of its Neighb.-tones***, Thus:

Ex. 284.

*1) o signifies "Neighboring note". —

For full information respecting "Grace Notes" (which cannot properly claim consideration in this book), the scholar is referred to good Musical Dictionaries, to any standard Piano-forte Method, or to Ph. Em. Bach's "Versuche über die wahre Art, das Klavier zu spielen".

***2) The *Key* determines the choice between the 4 Neighb.-notes. See 362, a, b.**

362. A very common form of Local embellishment consists in interposing the upper or lower Neighb.-note between a Principal tone and its repetition. In deciding the choice between the four possible Neighb.-tones, the following rules must be observed:

a. When a succession of harmonic (or melodic) tones is thus embellished, the Prin. tones which are about to ascend usually take the lower Neighboring-tone; and the descending Prin. tones take their upper neighbor, — especially when the progression is *diatonic.* That is to say, the Neighb.-tone lies opposite to the direction of the next Prin. tone.

b. The upper Neighb.-tone always *agrees with the Scale.* The lower one is usually the half-step. For illustration

Ex. 285.

***1) This lower Neighb.-tone is objectionable, because it interferes with the next Prin. tone. — *2) In older music (of the rigid School) the *lower* Neighb.-tone was also made to agree with the Scale; but when it is a *whole* step, it is sometimes quite stiff and ungraceful. — *3) The most notable exception to the *lower half-step* is made at the Leading-tone, which is almost always embellished by the *natural* 6th step, which lies a whole step below. — *4) Comp. note *1). — *5) *C*-Major. See rule *b*, above. —**

The Passing-notes, or "Progressive" Embellishment.

363. When a Neighboring-note, instead of returning for resolution to its own Principal tone, progresses in the same direction diatonically into another Principal tone, (or into the Neighboring note of the *next* Principal tone) it is called a Passing-note, because it becomes a medium in connecting the tones *of which it is a common Neighboring-note.* There are two kinds of these intermediate embellishing tones, which differ materially in effect, simply according to their respective *rhythmic* situation, namely: the ordinary unaccented Passing-note, which stands upon the lighter fractions of the beat; and the accented Passing-note, which occupies the stronger fractions of the beat, and resembles the Appoggiatura (371, a, b). For example:

Ex. 286.

*1) The *descending* Pass.-note, *unaccented*, is often identical with a Harmonic Seventh, see Ex. 157, note *3). — *2 The *accented* Passing-note from *below* is usually subject to 362, rule b. In this case $f\sharp$ sounds better than $f\natural$. — *3) The *descending accented* Pass.-note is often identical with the Irreg. Suspension; see Ex. 270, measures 4, 9. Also comp. note *1) above, and Ex. 253, note *3).

364. a. The term "***Progressive***" embellishment may be applied to those forms in which Pass.-notes are used, because a transition is thereby effected from one Prin.-tone into ***another***. That is, two different harmonic Intervals are involved (connected) by the embellishing note or notes.

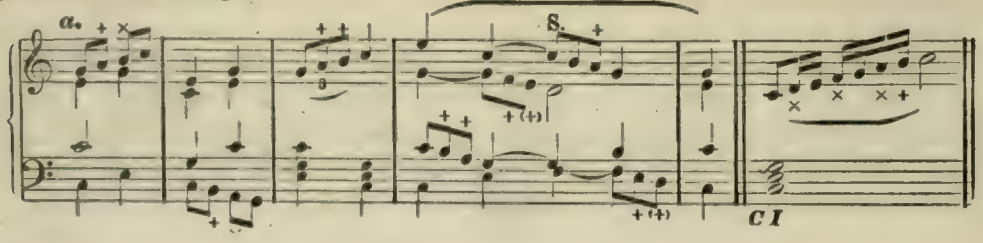
b. It is obvious that the application of **Neighb.-notes** (Local Embellishment, Ex. 285) is extremely simple and easy, and can be made at any single tone, in any part, without trouble. The use of **Passing-notes**, on the contrary, is not always so convenient, as all depends upon the ***size of the interval*** which they are to fill out. In Ex. 286 they are invariably applied where the part has a progression of a ***third***.

c. The difference between unaccented and accented Passing-notes is, as intimated above, that the latter, by reason of their rhythmic position, are more obtrusive and noticeable than unaccented Passing-notes. For this reason they are more effective when accented, but, at the same time, more ***dangerous*** than when unaccented, — particularly in any other part than in the Soprano.

365. a. The space between two harmonic Intervals in the same part may be filled out in this manner diatonically, even when two intermediate Passing-notes are required; that is, *Passing-notes may occur in direct succession*, in the *same direction*.

b. **Chromatic** Passing-notes are possible, to the extent of 3 or even 4; but they should be limited as much as possible to **ascending** progressions. *Descending* chromatics, especially in rapid succession (*i. e.* as Passing-notes) are peculiar, and often ridiculously lugubrious. For example:

Ex. 287.



*1) The simultaneous occurrence of a harmonic Interval and its chromatic inflection is possible, as here, but should be avoided, as a rule. Ex. 263 b (338 e) is a parallel case. — *2) Descending chromatics. — *3) In chromatic, and, as a rule, in diatonic progressions also, the *larger* intervals come *first* in the group. Compare the preceding measure. — *4) The *notation* of chromatic tones must conform to the principles of next-relationship, and to the Altered steps, in general. Hence, not *all* descending tones are written with Flats, nor all ascending ones with Sharps. In this case $g\flat$ would be incorrect, as it is too foreign to the Key (probably *C* or *F*-Major). —

Embellished Melody, and Running Parts.

366. Neighboring and Passing-notes may be employed in embellishing *any single* Part, in uniform Rhythm.

This device is perhaps most commonly applied to the Soprano Part (Melody proper). The following Melody, and its embellishments, appears in Op. 74 of **Beethoven:**

Ex. 288.

Beethoven, Sonata Op. 2, **No. 2, last movement;** compare measure 13 from the end, with measure 3.

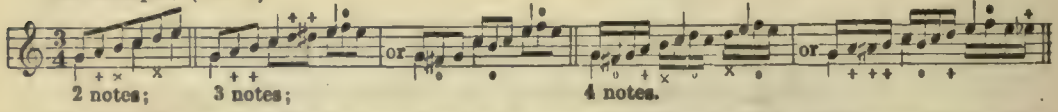
367. Ampler forms of embellishment (*i. e.* larger groups of notes, and in more rapid rhythm) almost always proceed from the simplest original figures, by adding Neighb.-notes. Thus:

Ex. 289.

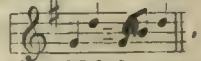
Exercise fifty-six.

A. The following Melodies are to be embellished *alone* (the indicated Harmony can be given to the left hand) in a *uniform* Rhythm of 2, 3 and 4 notes to a beat, *successively*: (see rules below):

For example, (No. 1):

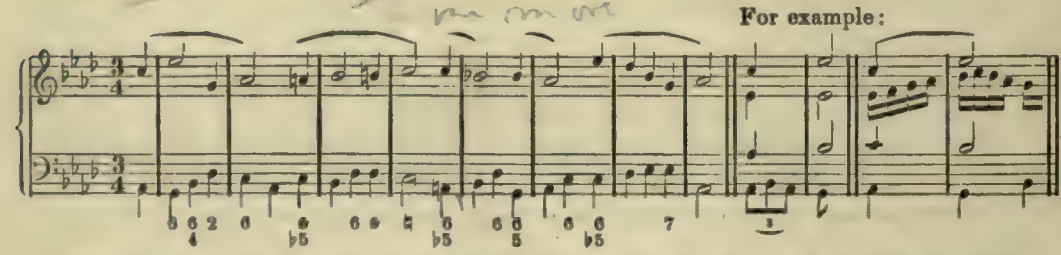


2 notes; 3 notes; 4 notes.

Rules: *1.* The running Rhythm must not be *interrupted or altered* until the Cadence-note is reached. The latter is *not* embellished. — *2.* The given Melody is not to be modified by adding *any other* Principal tones of the momentary Chord; excepting an *intermediate* Interval, when the skip is large:  , and, in rare cases, a *lower* Chord-interval. — *3.* As a rule, the original location of the given Melody-tones *in the measure* should not be changed too often by preposing an *accented* Pass.-note, though the possibility and necessity of sometimes using the latter must not be overlooked. See Ex. 286 b; Ex. 287, measure 1, 2. — *4.* The Embellished part must run smoothly; repetitions, as in Ex. 288 c (beginning of measures 3 to 6) should be avoided. — *5* The running part, when finished, must be strictly analyzed, and each tone accounted for, as Neighboring or Passing-note of the respective Melody tones. Review 362, and 365. —

B. The following Period is to be supplied, successively, with a **Running Alto,** Running **Tenor,** and Running **Bass,** in a rhythm of 3, and then 4, notes to a beat (and). See rules below:

For example:



Rules: *1.* The adopted Rhythm must not be *interrupted at the Cadences.* The embellished part generally *runs on* for a beat or so past the final Cadence-note in Soprano. — *2.* In order to afford the running part the necessary "spaces", it should not, in its original condition, be *too quiet.* Compare the part-progressions in the next Exercise. The given Bass part may be altered, at option. — *3.* The distances between the parts (Ex. 36) is of no consequence in this case. Rule 2, above, is *not valid* for any part but a **given Melody** (Soprano)! — *4.* The embellished part must run smoothly; but care must be taken to avoid formlessness and discursiveness. Hence, *Sequences are very desirable.* Comp. Ex. 288 c. — **See also: Mendelssohn,** Op. 54, Var. I; Op. 82 Var. II. — **Beethoven,** Op. 120, Var. 25. — **Cramer,** Etudes 41, 80, 16, 32 (Original Edition). —

C. Construct an *Original* Phrase with Running parts. —

Fundamental principles.

One, or more, of the 4 adjacent tones of any Harmonic Interval may be used in a variety of connections with the latter, as Local embellishment of that tone *alone;* or as accented or unaccented Passing-note between that Principal tone and the next. —

The upper Neighb.-tone agrees with the Scale; the lower one is usually the half-step. —

Several Passing-notes may occur in succession, in the same direction. —

Chromatic Passing-notes are only recommendable in *ascending* progression.

Embellished Harmony.

368. Instead of limiting the Neighboring and Passing-notes to the embellishment of one ***single*** part, as above, they may be employed ***in*** all ***of the parts***, in alternation, (or in two or three simultaneously), for the purpose of filling out the spaces between the Harmonic Intervals. In such cases, not only the Harmony itself becomes smoother, and more graceful and agreeable in effect, but the importance and melodic individuality of ***each single part*** is enhanced, in proportion to the extent and the manner in which Auxiliary notes are used.

369. Hints and Directions.

a. **All Embellishing notes progress diatonically.**

b. Passing-notes should not, as a rule, occur together with the Principal tone towards which they tend (in another part); comp. 338e. Nor is it well to *double* a note which is being embellished, if avoidable; see Ex. 287, note *1). — This rule must, however, be limited to ***sensitive tones***, which are not likely to be doubled in plain Harmony.

c. **Accented** Passing-notes should be used sparingly, especially in the middle parts, and must be handled with care and judgment, so that they may not disturb the harmonic sense, nor conflict too sharply with the other parts. Comp. 364b, c. — Avoid *chromatic* Passing-notes, as far as possible.

d. When Embellishing notes occur simultaneously in *two* different parts, they should generally *harmonize with each other* (*i. e.* should not differ from the *Chord* and from *each other* also). Therefore they must run *parallel in 3^{rds} or 6^{ths}* (see 46, Rule III; and Ex. 305); or, if in contrary motion, they may meet (cross) upon the *same tone.* — If Emb.-notes appear in *three* or *four* parts at once (which occasionally, though rarely, occurs) they must represent entire **Passing-Chords or Neighb.-Chords.** For illustration·

Ex. 290.

*1) In such rapid tempo these are simply Neighb. and Passing-Chords. See also: **Mendelssohn**, Op. 83, Var. II. — **Bach**, "Well tempered Clavichord", Book I, Prelude 22; "St. Matthew"-Passion, Introduction. —

e. ***Parallel Fifths***, which are very liable to result from filling out the harmonic spaces with Unessential-notes in this manner, are *always to be judged according to the quality of the* **Second** *Fifth*. If the latter is harmonic and perfect, the parallels are wrong; but if *inharmonic* or imperfect, they need not be avoided. Ex. 267, note *5), and Ex. 125, note *4) are illustrations of this principle. See also Appendix A, c.

Parallel Octaves, made in embellishing the Harmony, are, on the contrary, *always* wrong. These rules are also applicable to parallel Octaves and Fifths which are *interrupted* by a Passing-note. See also Ex. 106, note *1). For example:

Ex. 291.

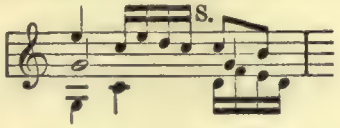
f. The Rhythm which is adopted for the Embellishment at the start, *must be carried along from part to part throughout the Piece* (or Section), with as few interruptions as possible. And when such interruptions are deemed necessary, they can only take place at the *accented beats*, and must be but a *slight change of motion*. For illustration

Ex. 292.

*1) These cessations of Rhythm are wrong, as they occur at the *weak* beats, and are too positive (from ♪ to ♩). — *2) Here the Tenor part takes up the adopted Rhythm. — *3) These interruptions are in the proper place, and are slight. —

g. The Rhythm of the Soprano, as most conspicuous and important melodic part, should always be as regular as possible (*i. e.* the rapid notes should fall on the weaker beats — 4 b).

Therefore the first measure of Ex. 292 b would be better thus:



h. *Regular Anticipations* should be avoided, as they disturb the flow of the part. *Repetitions* are best when the second note is a Suspension, or in Sequences. See Ex. 288 c. For example:

Ex. 293.

In other words, calculate the group of tones so that it will run into the next Harm. Interval at precisely the right moment; not *before* its time, as in Ex. 293. —

i. *Short* Rests constitute a very valuable resource of Harmonic Embellishment, and must not be overlooked. As a rule, a Rest may be substituted for the first *stroke of any group*, excepting immediately *after an Inharmonic note.* Ties, as seen in Ex. 292 b, answer exactly the same purpose, but are not always convenient.

For instance:

Ex. 294.

j. The Embellishment should not continue *in any one part too long*, but should be thrown from part to part; not in such regular intervals of time as to incur monotony, nor so irregularly as to destroy the melodic and rhythmic unity of the whole. It will usually be taken up in that part in which, 1^{stly}, the convenient "space" is found; and 2^{ndly}, where it conduces most to the melodic quality of the part. A glance at **Bach**, "Well tempered Clavichord", Book I, Fugue 11 and Prelude 12; and Book II, Fugues 2 and 4, etc. will suffice to show how the parts generally alternate and reciprocate, in keeping up the adopted Rhythm. —

k. That, from time to time, *more* than one part may be engaged with the Embellishment, has already been seen (Ex. 290); and particular attention is directed to the possibility of different parts embellishing simultaneously, in different rhythms (for instance, in ♪ and 𝅘𝅥𝅯 notes). —

Most of these rules must be applied with due allowance, for they are nothing more than *general principles*, which are subject to modification in multitudes of cases. If the Scholar has mastered the laws of Harmony (and euphony) up to this point, and has made a careful and conscientious study of the Works to which reference has been made, he may now confidently trust to his *ear* in detecting and improving harsh passages, *after having completed the Exercises at the table.* —

Exercise fifty-seven.

*1) To be embellished 3 times throughout *in alternating parts*, in a Rhythm of 2, *3 and 4* notes to *each beat*, respectively. — *2) The *Bass* carries the adopted Rhythm on into the 2nd beat. Comp. Exercise 56 B, rule 1. — *3) Precisely as at note *1). — *4) To be embellished like the other Phrases, twice, with *3 and 4* notes to a beat. — *5 The Embellishment does *not* include this short preliminary beat. — Here, again, Exercise 56 A, rule 2, is *not valid* for any part but the **Soprano!** — **Review** 369 a, d, f, g, i, k. — **Ex.** 292 b (and Ex. 302) will serve as models. —

Irregular Neighboring-notes. Appoggiaturas.

370. Either the upper or lower Neighb.-note may be *placed before* its Principal-tone, *without regard to what precedes* (*i. e.* irrespective of the manner in which they are introduced, — whether with a skip, or after a Rest, or at the very beginning of the Phrase, or in the strict diatonic manner shown in the former lessons).

Because, similar to the Anticipation, a Neighb.-tone pertains *exclusively to its own* Prin.-tone, *into* which it must be resolved, but *from* which it is not obliged to enter. (Comp. 349 e).

371. a. When the Neighb.-note enters with a ***skip*** it is called an **Appoggiatura,** or, if very brief, an Acciaccatura.

b. It may stand upon the strong fraction of ***its own beat***, (like the accented Pass.-note), or upon the weak fraction of the ***preceding beat.*** For illustration:

Ex. 295.

*1) At each beat marked NB. the Neighb.-tone enters with a skip. This whole passage from **Brahms** is a curious (and intentional) exception to the rule in 369 b. The embellished Melody is doubled in the Tenor. See also Appendix A, d. — *2 The Organ-point is transferred to the middle part, contrary to 330 b. — See also **Beethoven,** Sonata Op. 14, No. 2. first 4 measures; **Chopin,** Étude Op. 25, No. 5, first Part. —

372. a. Analogously, **both** Neighb.-notes may be set before their Prin.-tone, in either order, and, as indicated in 371 b, so that both occur *in the beat*, or both *before the beat*, or *one before* and the *other upon* the beat.

b. This is a Double-Appoggiatura, and the irregularity consists in the first Neighb.-tone ***progressing with a skip*** (into the other one). **Thus**

Ex. 296

*1) Strike the I with the left hand, at each accent. — *2) 362b must be respected in all cases. — *3) This order of tones is not as smooth as the preceding figures. The choice of upper or lower Neighb.-tone, as defined in 362a, refers to the *last* one in the group. — *4) When the Neighb.-tones are shifted back in this manner, it is simply an example of "Oblique Rhythm", very similar to Ex. 279d, e, f. — *5) In rare cases, the first Neighb.-note returns, as here, before the Prin.-tone appears. — See also: **Weber**, "Rondo brillant" in *E♭*-Major. —

373. This is a species of "Deferred Resolution" very often applied to Suspensions (which are also in reality "Neighb.-tones" of their Suspended note). This, and other interesting Deferred Resolutions, are exhibited in the following example (Comp. Ex. 269a, b):

Ex. 297.

Other Licences.

374. a. The peculiar value and efficacy of **Sequences**, in producing and justifying irregularities, is illustrated in the following examples, in which the ultimate Resolution of a Deferred Neighb.-note is evaded altogether. (Comp. Exercise 19, note *3), and 286):

Ex. 298.

*1) This first example does not consist of Sequences (like all the rest) but illustrates how a Neighb.-tone which *resembles* an Anticipation, may evade its diatonic Resolution. — *2) These unresolved Neighb.-notes are Sequences of the foregoing Irreg. Anticipation. — *3) In each of these cases one Neighb.-note progresses into the other (as Double-Appogg., — 372), without being directly followed by their Prin.-tone. — 4) Compare these Sequences with those in Ex. 288, from which they emanate. — *5) These extraordinary Sequences (like those in No. 4) are only imaginable in such very rapid tempo. — See also: **Beethoven**, Sonata Op. 31, No. 3, first movement, measures 10,9 *from the end.* —

b. During the ***regular*** Local embellishment of a Neighb.-note, the other parts may make a progression into a ***new Chord***, so that the Prin.-tone in the meantime changes its harmonic quality, or becomes ***itself inharmonic*** (Comp. Ex. 267, notes; Ex. 271, meas. 1). Thus.

Ex. 299.

*1) *During* its embellishment, the tone *c* in Soprano changes its quality from Fifth to Root. — *2) The Prin.-tone *a*? becomes an accented Pass.-note. The dotted line indicates that this is sometimes merely a *diatonic exchange* of Ant. and Susp. — *3) These measures prove that this whole irregularity is but one of the many phases of "Oblique Rhythm". — *4) Like note *2). —

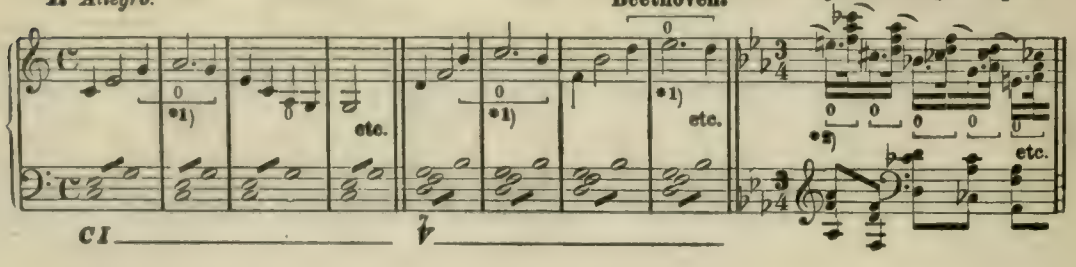
c. Neighboring-notes are sometimes employed as *Local Emb. of other Inharmonic tones*, usually of an Organ-point or Suspension. Ex. 300, 1—4). In very rare cases it is possible to embellish a *Neighb.-tone* itself in this manner, but only in very rapid succession, as "Appoggiatura-group". (Ex. 300, 5—6).

Ex. 300.

See **Beethoven**, Sonate Op. 14 No. 2, 1st movement, measures 15 and 17; Sonate Op. 101, last 15 measures. — **Mendelssohn**, S. w. W. No. 35, Introduction (Tenor); No. 45, last 12 measures. — **Schumann**, Symphony No. 3, third movement, measures 11—5 from the end. — **Beethoven**, Symphony No. 4, 3rd mov't, Trio, measures 50—59. —

d. It may be regarded as a species of Licence, to give greater prominence and weight (length) to an unessential Neighboring or Pass.-note, than to its Prin.-tone. Thus·

Ex. 301.

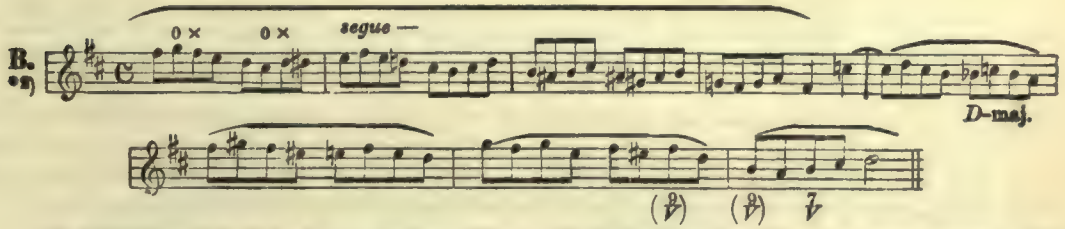


*1) These Neighb.-notes are accented, and much heavier than their Prin.-tones. — *2) The Dim.-Seventh of $E\flat$-Major (d-f-$a\flat$-$c\flat$), with proportionately heavier Appoggiatura on each $\frac{3}{4}$-beat. — *3) A long, heavy Passing-note between $f\sharp$ and d. — *4) A similar heavy Neighb.-note of a. —

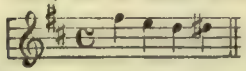
See **Beethoven**, Op. 120, Variation No. 1 (Bass). — Quartett Op. 18 No. 2, last 8 measures of the "Trio" 3rd mov't), in the Bass. — Also, Op. 120, Variations 12, 28 (Neighboring Chords), 8, 9, 27. —

Exercise fifty-eight.

*1) The Melody alone of this Phrase is to be embellished. firstly, in $\frac{3}{4}$-*notes*, as in Ex. 295—1, and in Ex. 299—3; secondly, with *3 notes* to a beat, as in Ex. 296—1; and thirdly, with *4 notes* ($\frac{3}{2}$) as in Ex. 296—2, and Ex. 295—4. The Harmony is placed in the left hand, for convenience. — Besides this, the Pupil may take any *short* Melodies of former Exercises, and elaborate them in the same three ways. —

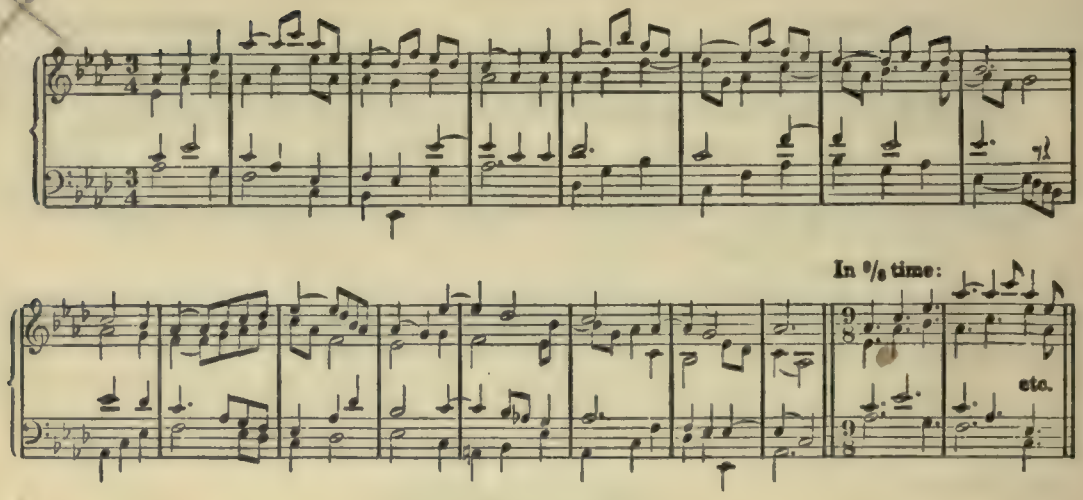


*2) This Melody is to be harmonized according to Ex. 299—3, with *4 Chords* in each measure. The second note of each group is a Neighboring-note; the third note may be harmonic, or may be a Passing-note; but in either case the Chord must be *different* from that upon the accented beat. — Simple form



etc. —

C. The following Period (an excerpt from the Pianoforte Works of C . . . . .), is to be embellished in *alternating parts*, as in the preceding Exercise: firstly, with *4 notes* to one of the given beats; and secondly, in $\frac{9}{8}$ time, with *3 notes* to a beat. Any necessary or suitable Licences (chiefly those given in Ex. 295, and 296—2) may be applied. Review 369 d, f, i, k:



D. To this Exercise may be added a similar elaboration of some of the former simple Phrases and Periods, either Original, or given in Parts II and III. —

"Polyphonic" Embellishment of Harmony.

375. As stated in paragraph 5, "Melody" is the most important factor of Music. It is the continuous, coherent thread or "line" of tones which the ear grasps and follows (as the eye traces the outlines of a picture), and from which the mind receives its most distinct impression of the Form of a Composition. In ordinary "Harmony", as distinguished from "Counterpoint", the principal melodic line, the "Melody" proper, is placed in the Soprano part, for reasons given in 41 a; and the other parts, though also melodic-lines, are of an inferior order, and only serve to accompany and support the prime Melody, without assuming sufficient individuality to draw attention to themselves and away from the real Melody. This **singleness** of Melody is the characteristic of the **Homophonic** style of Composition (*e. g.*, Mendelssohn's "Songs without Words") in distinction to the **Polyphonic** style (*e. g.*, the Fugues of Bach), in which *each part is a separate and independent Melody-line, of equal importance with its fellows*, or which is, in other words, a **combination** of Melodies.

376. When simple Harmonies are embellished to such a degree that the attention is diverted from the fundamental succession of Chords, by the ***melodic individuality*** which each separate part acquires, the result is a species of **Counterpoint.** (Comp. 368 and 327). But **absolute** individuality of the parts can only be obtained when the Embellishment is based upon some adopted melodic ***Figure*** or ***Motive***, which, appearing in alternation, first in one part and then imitated in another and another, institutes that melodic ***uniformity*** and ***equality*** of the parts, which is an indispensable requisite of **pure** Counterpoint or Polyphony. —

The Pupil will be sufficiently convinced of the fact that the simple Embellishment of a given Harmony can never quite reach the high standard of strict Polyphony, upon comparing his most elaborate Embellishments of the above Exercises, with the simplest 4-part Fugue of Bach. For while, in the former, the part-progressions emanate passively from a predefined Harmony, in the latter case the Harmony itself is created by the independent active progression of the separate parts.

377. Polyphony is the highest grade of Music, and demands the greatest skill in the treatment of musical Material. Hence its practice by beginners is out of the question. Nevertheless, Harmony

which is embellished *according to an adopted melodic* Motive (376), approaches the idea and resembles the effect of the polyphonic style, and is well worth being thoroughly exercised.

378. Thus, any given succession of Chords, — for example·

$$^{4}/_{4} \quad \mathrm{I} - \mathrm{II} - \mathrm{V} - \mathrm{VI} \mid \overset{7}{\mathrm{II}} - \overset{7}{\mathrm{V}} - \mathrm{I} \parallel$$

may be embellished in many ways, with a variety of Motives, as follows:

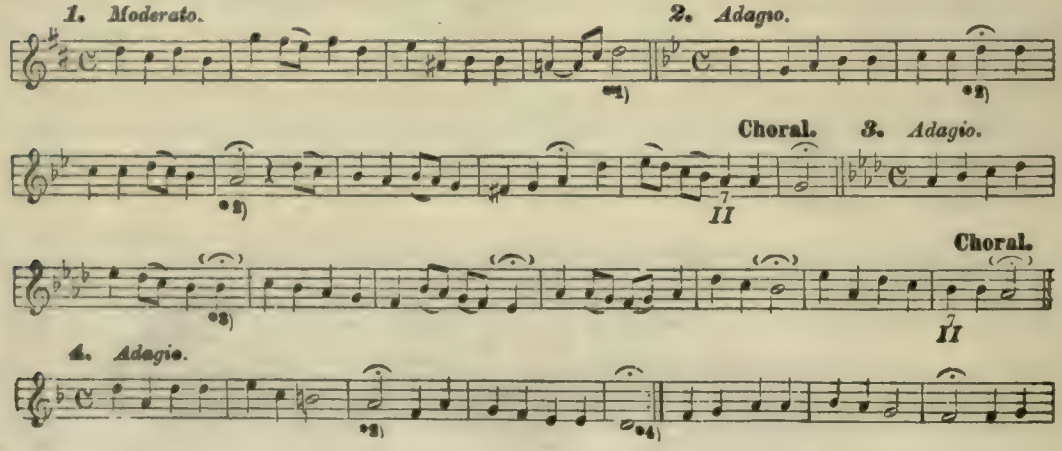
Ex. 302.

*1) ***"Progressive"*** **Embellishment (364 a) is more appropriate in this style of Music than *"Local"* Embellishment** (360) **as** at note *2), because it is of a superior order, and more essentially melodious. — *3 The *direction* of the intervals may be reversed, as here, at any point. This is called an imitation **in** *Contrary Motion.* — *4) **A** slight modification of the given Harmony, like this Passive Res., may be made **without** scruple, for the sake of the adopted Motive. — *5 Harmonic Motives of this kind afford the most natural and convenient basis for more rapid and ample Motives, as in No. 6. It has already been seen that larger Motives and Figures proceed generally out of simple small ones. See Ex. 289. — *6) Motive. — *7. Motive. — *8) Op. 74. See Ex. 288. — For further examples of Embellished Harmony, or Free Polyphony, see **Beethoven**, Op. 120, Variations 11, 14. — **Mendelssohn**, Op. 54, Variation 2; **Op. 83 Var. 2. — Bach**, Well-tempered Clavichord, Book **I**, Preludes 12, 22, 23; Book II, **Preludes 5, 11, 19.**

Exercise fifty-nine.

The following Melodies are to be harmonized with moderately simple Chords (and Modulations) **and** the Harmony thus obtained **is** then to be embellished in a continuous Rhythm of ♪- notes (2 notes to a beat) in alternating parts, as in the two preceding Exercises, but with respect to the principles above enunciated. That is: the main object should be to increase the *melodic effect* of each separate part, especially of the **three lower parts.** The Embellishment may simply tend to promote the melodic flow of each part, in a general way, **or** it may be based partly or entirely upon simple Imitations (with small Motives) as in Ex. 302.

Rules: ***1.*** **Review** 369 a, d, f, and 370. — ***2.*** **The given melody is** *not* **to be changed,** *i. e.* **does not take any** part in the Embellishment. — ***3.*** **The** Embellishment may be added *after* the Chords have been found; **or** the Harmony may be determined *at once* in its embellished form. — ***4.*** **The use of regular Suspensions (with Ties), and of Ties generally, is very advantageous!**



*1) Besides this Melody, add the similar manipulation of Exercise 32, Melodies *b*, *a*, and *d*; and Exercise 46, Melody *d*. — *2) The end of each line (marked ⌒) must be a strong *Triad*, and the Rhythm is interrupted. These Choral-Melodies are to be harmonized and elaborated in a more serious (strict) manner than Melodies 1, 5 and 6. For models, see the "Chorals" in Bach's "St.-Matthew"-Passion. — *3) The Pauses (⌒) in this Choral are to be ignored. — *4) The Repetition must be written out, with different Harmony. — *5) Sequences should be treated as symmetrically as possible. — *6) In this and the following Melody the pupil should work with the utmost freedom, and depend somewhat upon his ear. — *7) This last Melody may be elaborated in several different ways (but only in 𝅘𝅥𝅮-notes).

The Harmonizing of Embellished Melodies, and unfigured Basses.

379. When a florid (embellished) Melody is to be harmonized, it is first necessary to reduce it to its original simple Harmonic tones, by setting aside all such brief ornamental tones as are certainly, or apparently, Unessential notes. The melodic outline thus obtained may then be harmonized more or less simply, according to the **character** and **tempo** of the Melody (381). The more animated and ornate the Melody is, the more smooth and *quiet* should its harmonic accompaniment be.

380. In reducing a florid Melody to its simplest elements, the following points must be borne in mind:

a. Every note which *progresses with a skip* is almost certain to be Harmonic. (See 369 a; and comp. 357 and 372 b).

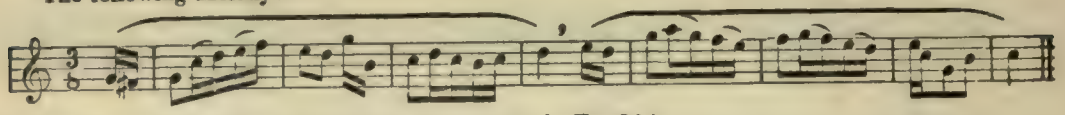
b. Notes with *Accidentals* will be Inharmonic, excepting when they are unmistakable indications of a *legitimate and natural* Modulation.

c. The *longer* notes are likely to be Harmonic.

d. The natural order (and rhythm) of the Chords, and the fundamental principles of Modulation, define the nature of most of the notes, especially those which occupy *accented* beats.

The following Melody:

Ex. 303.

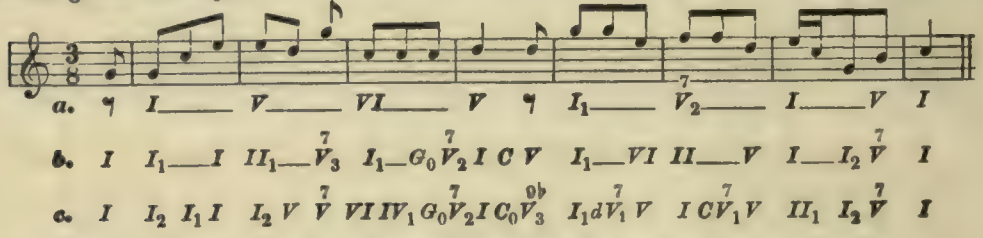


reduced according to these principles, becomes as in Ex. 304.

381. The tempo of the Melody is a consideration of such moment, that it will usually precede all others, in defining the *order* and *rhythm* of the accompanying Chords.

For the more rapidly a Melody moves, the more Emb.-tones it is naturally likely to embrace, and *vice versâ*. Comp. 232 a. — The foregoing Melody would be harmonized about as follows, in different grades of tempo:

Ex. 304.



at *a.* *Allegro vivace*, an average of one Chord to 2 or 3 beats of the Melody,
at *b.* *Allegretto*, one Chord to 1 or 2 beats of the Melody;
at *c.* *Andante*, one Chord to each beat, on an average; and finally, if the tempo were *Largo* or *Adagio*, the original Melody (Ex. 303) would not be regarded as "florid" at all, but each single tone, as *essential* constituent of the Harmony, would demand its own Chord.

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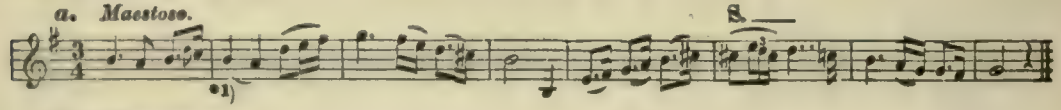
382. Florid **Basses** (unfigured) are easier to reduce to their simple Harmonic groundwork than florid Melodies, because their construction is generally more regular, the *accented* notes are almost invariably *harmonic*, and they suggest their Harmony more than Melodies do. See 277.

Exercise sixty.

A. Florid Melodies.

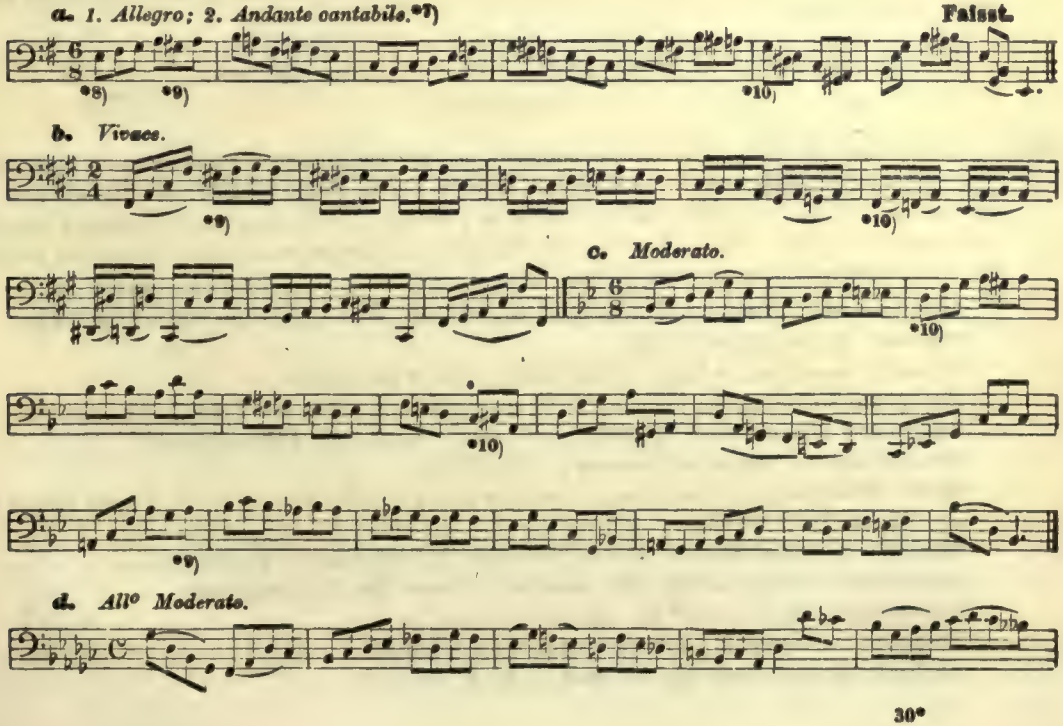
a. *Maestoso.*

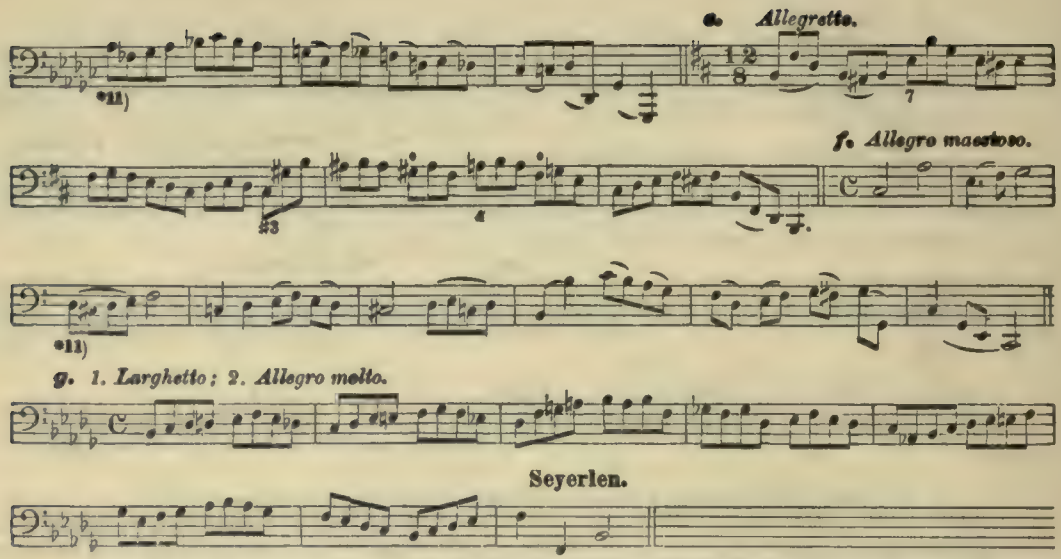


b. *Allegretto.*

*1) The first 3 Melodies are supplied with slurs which exactly indicate the Rhythm of the Harm (lower parts). — *2 May be a Neighboring-note. — *3 Suspensions. — *4) The predominating tone in a group is the *Principal-tone!* — *5) In Melodies of this kind, with rapid figures and large compass, the three lower parts may be written *together* on the lower staff. 413 may be applied freely! — *6) To be harmonized in each of the 3 given grades of tempo, according to 381. —

B. Florid Basses (382).





*7) Compare note *6) above. — *8) In all of these Basses, excepting perhaps *f*, the three upper parts can be placed *together* on the upper staff. 413 may be applied. *The Pupil's first care must be, to obtain a good* Melody *(Soprano)*. This may be made complete, before the inner parts are added. Define the Melody at first approximately, *from Accent to Accent*, with general regard to the Modulations, and, as a rule, in contrary direction from the Bass. The slurs may be ignored, or optionally modified. — *9) Note *4) above. — *10 The tones which *skip* are Harmonic (380 a). — *11) Sequences should be treated as symmetrically as possible.

Analysis.

383. In conclusion, the Scholar is recommended to *analyze* the following Compositions, from time to time during the study of Part V, in the given order, defining the Chords, the Modulations, and all Inharmonic Intervals. Ex. 305 will serve as a model, though more knotty passages than these will rarely be found. Always consider the **Tempo**, and direct the attention constantly **forward**, to the following Chord or two. (Comp. 238—1; 243 d, and e; 326).

Mendelssohn: Songs w. Words, Nos. 15; 12; 30; 6; 48; 41; 28; 35; 27; 11; 40.
Cramer: Etudes, Nos. 75; 84.
Mozart: Sonata in *D*-Major (Cotta Edition, No. 14) complete.
Beethoven: Sonata Op. 14, No. 2, 1st mov't; Op. 27, No. 1, 1st and last movements.
Schubert: Sonata No. 8 (*C*-Minor), 1st mov't; No. 5, Op. 143, complete.
Mendelssohn: *Scherzo a Capriccio* in $F\sharp$-Minor.
Bach: Well-tempered Clavichord, Preludes (Book II) 12; 16; 19; and Fugues (Book I) 5; (Book II) 7; 21
Chopin: Nocturne, Op. 37, No. 2; Preludes Op. 28, Nos. 7; 9; 17; (14).
Beethoven: Variations Op. 120, complete; Sonata Op. 101, complete.
Schumann: "Humoreske" Op. 20, complete.
Wagner: "Lohengrin", Introduction to Acts I and III.
Brahms: Piano-pieces, Op. 76, Nos. 7; 6; 4; 1; 2; 3.

Ex. 305

a. Andante.
Mozart.
etc.
FI V0 gV0 I BbV cV
b. Andantino.
Chopin.
Ant.
GV3 I1 (V) I I2 I1 aII V V I
c. Allegro.
Schumann. Op. 21, No. 8.
297 b.
248 a.
247 a.
etc.
EbV V3 GbV V3 I1 IV DbV1 I EbV I FV1 I

PART V.

VOCAL AND INSTRUMENTAL HARMONY WITH AN IRREGULAR NUMBER OF PARTS (LESS OR MORE THAN FOUR). STYLE.

Section I[st]. Vocal Harmony.

384. The general distinction between Vocal and Instrumental Harmony is, that the former is more *strict*, more *quiet*, and more limited in *compass* (Ex. 34). In Vocal music there is a definite number of "Voices" or tone-lines, which must be adhered to and treated with more even consideration than Instrumental "Parts", which often sacrifice their individuality, partly or completely, in the variable volume of tone. In both species of Music, it is very common to decrease the ordinary number of four parts (38) to three, or even two. When this is done, it is advisable to omit an Extreme (outer) part, so that the remaining three or two parts *represent adjacent registers*; *i. e.* Soprano, Alto, and Tenor (*as Bass*); or Bass, Tenor, and Alto (*as Melody*); or, better still, *all female*, or *all male* parts.

Three-part Harmony.

385. a. When the number of parts is decreased in this manner, the omission of certain Chord-intervals is unavoidable, and duplications are less common than in regular four-part Harmony. The rules given in 43 and 44 are valid, to a certain extent, for every variety of Harmony; but they must be freely modified as occasion requires, for the sake of *melodious voice-progressions*, — a consideration *which increases in importance as the number of parts is reduced.*

b. When the number of parts is diminished, the harmonic structure becomes more transparent, and the melodic individuality and distinctness of each single part is proportionately enhanced. Inversely, the *greater* the number of parts, the less attention can be directed to the separate parts, which (*always excepting the two* Outer parts disappear in the volume of the collective Harmony.

386. a. In **Triads**, the Fifth may be freely omitted, when necessary, and the Root doubled. *The Third must not be omitted under any circumstances!*

b. In **Chords of the Seventh**, the Fifth is more generally omitted than the Third, though much depends upon the quality of the Chord. The Root may occasionally be doubled, and both Third and Fifth omitted

c. In **Chords of the Ninth** (which are, naturally, of very rare occurrence) **Third and Fifth, or Root and Fifth are to be omitted. No Intervals are doubled. Thus:**

Ex. 306.

*1) **The rules given in 42 apply to** *three-part* **Harmony only in a very limited sense. The distance of an octave apart should not be overstepped by adjacent parts, if** *avoidable*, **but many cases will be found where even the** *upper pair* **will diverge more than this, without bad effect. —**

387. a. The Perfect Cadence may consist of the open Tonic Octave (I, with Third and Fifth omitted); or the I_1 may be substituted for the I itself. But in the latter case the ***Fifth must be omitted*** **and the** ***Root doubled***, **in order to impart greater emphasis to the Tonic note.**

b. An Inversion may also be substituted for the V or $\overset{7}{V}$ at the Cadence; and the lower parts may ***cross***, **if the Cadence can thereby be made smoother or stronger. Thus:**

Ex. 307.

See the Terzett for female voices in "Elijah"; and Ex. 213—1. (Tenor, Alto, Soprano). —

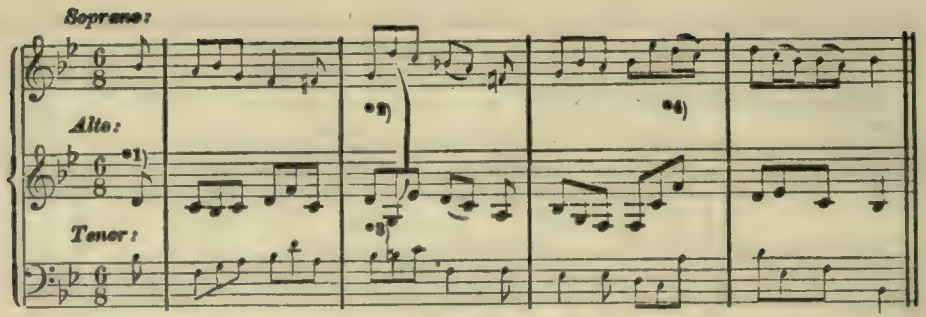
Exercise sixty-one.

A. Exercise 25, Basses a, c, d, f (and the others, at option) are to be transposed a ***fifth higher***, and set for Tenor, Alto and Soprano. The given Bass-figuring may be retained, or the pupil may treat the Basses as ***unfigured***, and choose his own Chords and Modulations. First ***complete the Soprano-Melody*** (regardless of the given Positions) and add the Middle-part last. —

B. Exercise 32, Melody f; Exercise 33, Melodies c, d, g; Exercise 34, Melodies b, h; Exercise 40 e, g — to be set for Soprano, Alto and Tenor. No regard need be paid to the given slurs. The scholar is recommended to use a ***separate staff for each Part***, as in Ex. 308. —

C. The Melodies of Exercise 32 may be transposed an ***Octave lower*** (or a little less, according to circumstances), **and used as Alto Part,** accompanied by one upper and one lower part, thus

Ex. 308.



*1) Given Melody, Exercise 32, *f*. — *2) Ex. 306, note *1). — *3) The lower parts may occasionally cross. — *4) *Passing-notes* may be used at discretion, but according to the rules of Rhythm; *i. e.* chiefly on unaccented beats. And perfect freedom may be exercised in Modulating. — This Exercise is more difficult than A and B, and can be omitted, if necessary. —

Two-part Harmony.

388. Two-part Harmony is, properly speaking, nothing more than a succession of ***intervals***; for the fundamental succession of *Chords*, when expressed by two parts alone, is necessarily vague. Nevertheless, even *two* parts must coöperate in obedience to the laws of harmonic progression, as far as their application is possible, and for this reason, the only absolutely unquestionable intervals are *the* 3^{rds} (or 10^{ths}), and their inversions *the* 6^{ths}, — the fundamental intervals of Chord-formation. A distinction must be made between the *full* beats and the *fractions* of beats, as follows:

389. Rules for full beats.

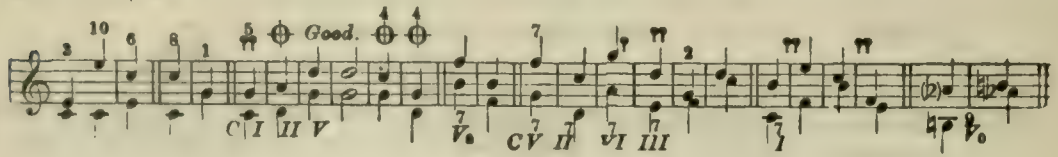
a. A *Third* (or, rarely, a *Tenth*: Ex. 18) or a *Sixth* can be used without any other limitation than that indicated in 391 a, upon full beats, accented or unaccented, and in any duration. Whether the 3^{rd} or the 6^{th} be chosen, depends upon the Chord they evidently represent, and upon the melodic tendency of the parts.

b. The open *Octave* is admissible.

c. An open *perfect Fifth* represents a Triad with omitted Third, and is therefore to be avoided. It is only allowed, exceptionally, *in the V*. The *perfect Fourth* represents a $^6/_4$ Chord without its Third, and is prohibited. The *diminished Fifth* and *augmented Fourth* represent the $\overset{7}{V}_0$ with omitted Fifth, and are therefore admissible.

d. The open *minor Seventh* (or *major Second*) is allowed, but the quality of the Chord which it represents must be considered. *Major Sevenths* (or *minor Seconds*) are to be avoided. The *diminished Seventh* (*augmented Second*) is allowed. See also paragraph 26. — For illustration:

Ex. 309.



390. Rules for fractions of beats.

a. Upon fractions (accented or unaccented) of beats, **any interval may be used, either as harmonic combination, or as Suspension, Neighb.-note or Passing-note.**

b. All exceptional intervals (7^{th}, 2^{nd}, 9^{th}, 4^{th}, 5^{th},) must appear as modification of the unobjectionable 3^{rd}, 6^{th} or 8^{th}. Thus:

Ex. 310.

391. a. Intervals of the Third or Sixth should not occur too often in direct succession; as a rule, not more than three (or four) times; otherwise, the necessary harmonic variety, and independence of the parts, would be altogether wanting.

b. It is objectionable to use ***weak*** or ***harsh*** intervals in succession.

c. The part-progressions must be as ***melodious*** as possible (385 b).

d. The rules of Rhythm must be strictly regarded. Ex. 308, note *4). — For example:

Ex. 311.

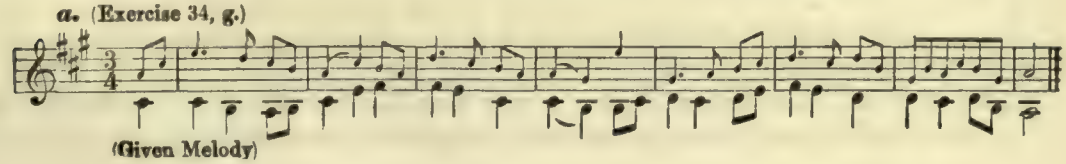
The rules of Two-part Harmony, as here enunciated, are the essence of the laws of two-part *Counterpoint*; the Scholar will do wisely to study them with great attention, for this reason.

Exercise sixty-two.

A. Exercise 33, Melodies a, e, g, and Exercise 46, Melodies b, c, i: to be supplied with an accompanying Alto part, according to the above rules. It is not necessary to construct the Alto part in exactly similar Rhythm to the given Melody; on the contrary, diversity of Rhythm is very desirable. But see 391 d, and be careful that the ***heavier*** notes occupy ***accented*** beats. The utmost freedom in modulating is allowed.

B. Exercise 32, Melodies a, b, and Exercise 47, Melodies a, b, d, f, g, h: to be transferred an Octave ***lower***, ***as*** Alto (***or Tenor***) ***part***, and supplied with an accompanying **Soprano.** For example

Ex. 312.



b. (Exercise 33, c).

(Given Melody)

5—8-part Harmony.

392. When **Five, Six, Seven** or **Eight parts** are employed, it is important to keep the parts well balanced, in regard to their *distances* from each other, and in regard to the *duplication* of the Chord-intervals. It is particularly unfavorable in copious Harmony when the *lower parts lie too close together;* but even the upper parts should avoid too great proximity. For instance:

Ex. 313.

393. *Hints and directions.*

a. In serving to prevent unevenness in the disposition of the parts, and as an efficient means of avoiding parallel 5^{ths} and 8^{ves}, the **inner** parts may be *crossed* without scruple. But an *inner* part should never cross either the *Soprano* or *Bass.*

b. Sensitive notes of the scale, and sensitive Chord-intervals (*i. e.* the Leading-tone, Fifths, Sevenths, Suspensions etc.) may be doubled.

c. Interrupted 8^{ves} and 5^{ths}, and Unequal 8^{ves}, are allowed *between any but the two* **outermost parts.**

d. The two or three lowermost parts must be kept wider apart than the higher ones (excepting when any two adjacent parts have the same tone *in unison*), as small intervals sound dense and disagreeable in the low register. Ex. 313, measure 3.

e. Wide skips are often unavoidable, particularly where the parts cross and re-cross; but care should be taken not to write such progressions as are difficult to sing; such as skips of the seventh, and augmented or diminished intervals.

f. When a larger number of parts are employed, Chords of the Seventh should be freely used, as they are more copious and afford more tone-material than simple three-tone Chords. See also Ex. 142, measures 3 and 4.

g. The harmonic progressions should be very simple. The difficulty of connecting certain Chords in Four-part Harmony is greatly increased with each additional part. This applies

particularly to Foreign Chord-progressions (Appendix B.) and Chromatic successions. The combinations of related Chords, and *especially* Repetitions, give but little trouble.

394. The above-mentioned licences are to be applied more or less freely, in exact proportion to the number of parts; for *the greater the volume of Harmony, the less perceptible are all irregularities in the treatment of the separate* inner *parts*, and, at the same time, *the more difficult are they to prevent.* Compare 385 b.

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395. **a.** In **Five-part** Harmony (the usual four voices with an additional Soprano or Mezzo Soprano, or Tenor), sensitive notes and Intervals need not be doubled. The Principal notes of the Scale and Chord are generally *tripled.*

See **Mendelssohn;** "St. Paul", Choruses Nos. 23 and 36. — **Bach;** *B*-Minor Mass, Choruses Nos. 1, 4, 11, 12, 15 etc.

b. In **Six-part** Harmony (doubled Soprano and Tenor) the Principal notes of the Scale are tripled, as a rule, and the next best Interval of the Chord doubled. But, as strict observance of this rule would needlessly enhance the difficulties which attend the manipulation of a large number of distinct parts, it must only be applied as a general principle.

See **Bach;** *B*-minor Mass, Chorus No. 20.

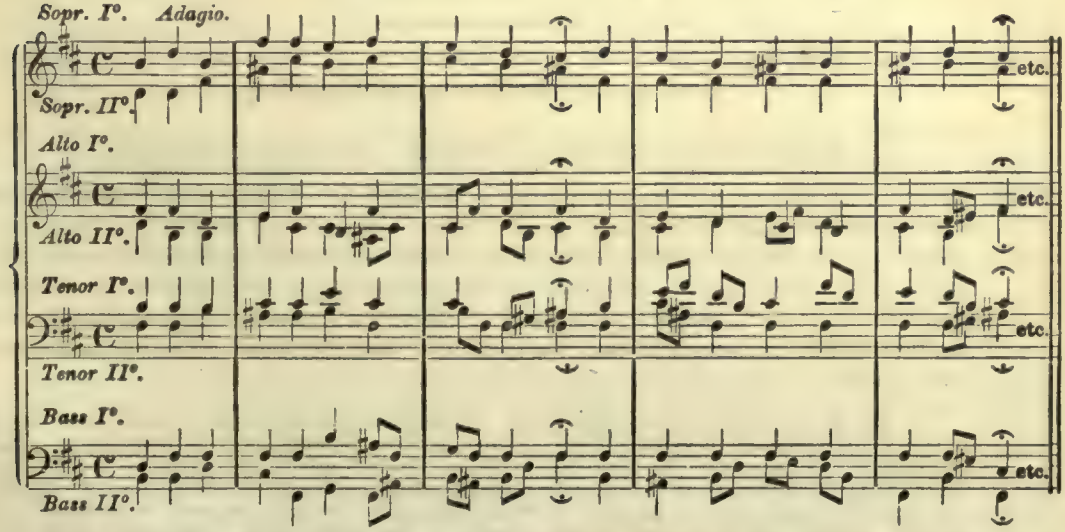
c. **Seven-part** Harmony is comparatively rare in vocal music, owing to the inequality of the parts. The original four parts are usually doubled, as in eight-part Harmony, with the exception of the Alto, or Bass.

See **Handel;** "Alexander feast", Chorus No. 6. — **Beethoven;** "Fidelio", Act I, Finale, Chorus of prisoners (also eight-part).

d. In **Eight-part** Harmony (each of the four original parts doubled) every licence, in reference to the duplication of sensitive Intervals and irregular part-progressions, may be freely employed.

See **Bach;** *B*-minor Mass, Chorus No. 21. And the following illustration.

Ex. 314.



Other examples of Six, Seven and Eight-part Choruses may be found in Handel's "Israel in Egypt", (*e. g.* Nos. 12, 13, 16, 19, 23, 25 etc.).

Exercise sixty-three.

*1) To be harmonized twice: at first with *two Tenors*, and then with *two Sopranos*. Three staves are to be used (similar to Ex. 308). — *2) The end of each line, marked 𝄐, will be a substantial *Triad*. — *3) These heavy Choral-melodies must all be harmonized, naturally, with very strong Chords. On *full* beats (𝅗𝅥), $^6/_4$ Chords, and Inversions of Chords of the Seventh, should be avoided, only excepting the I_2, V_1, V_3 and II_1. Third-class Discords are only permissible on *fractions* of beats (♩-notes, and Passing-notes should be used with caution. Suspensions are good. — *4) In this Choral four staves must be used, as in Ex. 314. — *5 Seven-part Harmony (*one Bass part*, instead of two, during the first line ($4^1/_2$ measures); and then 8-part Harmony to the end. — Besides these Melodies, the Chorals in Exercise 59 (2, 3 and 4) and some of the Basses of Exercises 6, 7, 8, 9, 11, 26, may also be set for 5—8 parts. —

Section 2nd. Instrumental Harmony.

Figuration or Broken Chords. Accompaniments.

396. Instrumental music possesses a multitude of advantages over Vocal music, the most striking of which are: more extended *compass*, greater facility of *technic*, and the ability of producing *simultaneous* tones upon the majority of single instruments (only excepting the solo wind-instruments, which most closely resemble the human voice). Consequently, this style of music offers the Composer a broader field than the pupil has found in all the foregoing pages, and affords free scope for the exercise of many important harmonic and rhythmic effects which are precluded in the Vocal style.*1)

*1) The Instrument which is probably most familiar and most accessible to the Scholar, and which is best suited to the purpose of this Section, is the **Piano-forte.** Other solo instruments, such as the Organ, Harmonium, Violin etc., or an *ensemble* of different solo instruments (as in Chamber or Orchestral music) demand certain considerations in their manipulation, entirely independent of the Harmony, which it is the province of Instrumentation to expound. Therefore the topics of this Section are to be exercised in the usual manner, as Piano-forte music (but not *at* the Piano); or, very exceptionally, for the Organ or Harmonium.

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397. When the Intervals of a Chord appear *successively in the same part*, instead of *simultaneously in different parts* (as heretofore), the Chord is "broken" or "dissolved".

398. The succession of the different Chord-intervals constitutes a melodic Figure or Motive; hence, the term "Figuration" is applied to a harmonic progression in which the Chords are broken according to an adopted Motive.

399. The advantages arising from this treatment of the original Harmony may be briefly enumerated as follows:

a. The Harmony loses much of its bulkiness and stiffness, and becomes lighter and clearer.

b. It assumes a *melodic* character, more gratifying to the ear than plain harmonic progressions.

c. Figuration contributes to the animation of the *rhythm*.

d. It facilitates, to a certain degree, the combination of the Harmonies, inasmuch as not *all* the Chord-intervals are engaged in actual progression at the same moment.

e. When utilized as Accompaniment (embracing all, or a portion, of the parts not engaged with the Melody) it institutes rhythmic variety between the parts, by means of which the Melody proper becomes more prominent and distinct. Moreover, it imparts grace to the musical thought, and, when properly treated, conduces to the uniformity and regularity of the structure.

400. a. There are three distinct species of Figuration, namely:

Harmonic Figuration (consisting exclusively of Chord-intervals);
Melodic, or Mixed, Figuration (in which Inharmonic tones are interspersed); **and**
Rhythmic Figuration (in which the tones or Chords are simply reiterated).

b. Besides these, other distinctions are made according to the *number* of parts or voices employed, **and the** *location* of the part engaged in Figuration (*i. e.* the **Figural part** or voice).

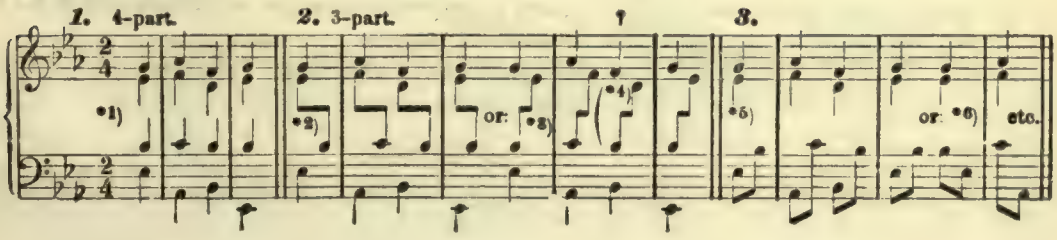
Harmonic Figuration.

401. a. The simplest kind of Harmonic Figuration is based upon regular and ordinary four-part Harmony, in which the parts are not too widely separated. The notes of two, or three, adjacent parts (or of all four) appear successively, in such order as the adopted Motive dictates, but under all circumstances so *that the most important harmonic interval* (usually a 3rd or 6th) *falls upon the accented beats.*

b. The greatest attention must be paid to this point. When the fundamental Harmonies are dissolved into a succession of ***single*** tones, instead of appearing in a body, the danger is imminent that they may produce but an imperfect impression, and fail in properly supporting the Melody. Therefore care should be taken to arrange the simultaneous Intervals so *that they constitute* **complete** ***harmonic combinations at*** **prominent** ***rhythmic points*** (*i. e.* accented beats), according to the general regulations of four, three, or two-part Harmony.

For illustration:

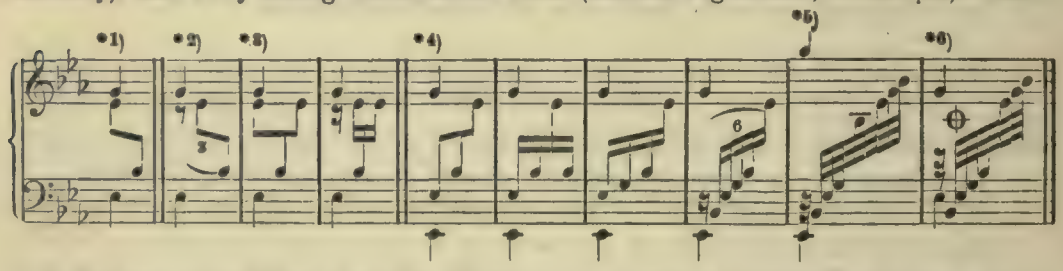
Ex. 315.



*1) The given harmonic progression (a Melody, with necessary Chord-basis). — *2) The notes of the original *Alto and Tenor* are taken successively, constituting the single Figural part. — *3) Here in *Ascending* succession, the Tenor note first. — *4) The open fifth is somewhat too meagre. Comp. 389 c. — *5) The notes of the original *Bass and Tenor* in ascending succession. — *6) In descending succession, the Tenor note first. This is a little objectionable, as it seriously interferes with the Bass to displace its tones in this manner. — *7) *Soprano and Alto* merged in one Figural part. — *8) This is still more questionable than note *6), because the Melody is more important than the Bass. — *9) The three lower parts merged in one Figural part. — *10) All four parts merged in a Figural part.

402. All larger, (*i. e.* longer or more copious) Figures (or Figural Motives) *grow directly out of the simple Motives which are derived in this way from the original four-part Harmony*, by the following means: *a.* by **Rests**; *b.* by **Repetitions** (*i. e.* returning to a former Chord-tone); *c.* by **Extensions** into a higher or lower octave (equivalent to more copious Harmony); and *d.* by adding **Inharmonic** tones (Melodic Figuration, — see 409). Thus·

Ex. 316.



*1) The given simple Motive is from Ex. 315, No. 2. — *2) A Rest is substituted for the first stroke. — *3) The first tone recurs as third stroke. — *4) The *lower octave* of the original Alto note is preposed. The Bass is lowered, to make room for the extension. — *5) The "Extension" of the original Motives upward and downward is perfectly natural, and subject to no other limitations than those set by the Outer parts, which must not, as at *6), be passed (crossed) by the Figural part.

403. It will be seen from these examples, that when one part is made to fulfil the object of two or more parts, by taking their respective Intervals in succession, it separates itself from the rest of the parts in the diversity of its rhythm, and becomes a distinct **Accompanying part** (399 e). And, by this means, the number of parts is reduced to three, — or perhaps less, if the Figural part includes either the Melody, or the Bass, or both.

The Registers of the Figural part.

404. The Figural part perhaps most commonly occupies the **Middle Register** (**Ex. 315—2**), embracing a part, or, if necessary, *all* of the possible harmonic Intervals *lying between the original (given)* **Melody,** *and its* **Bass.** Thus:

Ex. 317.

See also: Mendelssohn, Songs without Words,
No. 15 *1) (figural Motive of 6 notes);
No. 19 („ „ „ 5 notes preceded by a Rest),
No. 21 („ „ „ 10 notes and a Rest: peculiar rhythm);
No. 30 („ „ „ 3 or 4 notes: arpeggioed Chords).
Beethoven, Sonata Op. 13, Adagio, measures 1—8 (figural Motive of two notes, repeated).

*1) Where the Melody proper begins (meas. 7); and the same in every other Example.

405. a. But the Figural part may also occupy the **Lower Register** (Ex. 315—3), embracing the Bass, and accompanying the given Melody and, if three-part Harmony, one middle part (Alto).

b. Or it may occupy the **Upper Register** (Ex. 315—4), embracing the original Melody, and accompanying the Bass and one middle part (Tenor).

c. Or it may occupy the **Uppermost Register as Accompaniment,** independent of the Melody. The latter, in this case, will appear in either middle part, or, more rarely, in Bass. See 41 a, note *1). For illustration:

Ex. 318.

d. *Allegro.* **Mendelssohn. No. 3.**

*1) 405 a. — *2) 405 b. The added downward stems merely serve to mark the original Melody, and do *not* constitute a separate part. The *Figural part embraces* the Melody. — *3) 405 c. The Melody lies in Tenor, and, in playing, must be made prominent by accentuation.

See also: **Mendelssohn**, S. w. W. No. 18, measures 6—9; 14—17 etc.; No. 5, measures 19—22, 58—66. — **Cramer**, Études, Nos. 3, 9, 12, 74, 55, 51. (*N. B.* Original complete Edition). — **Beethoven**, Sonata Op. 53, 1st mov't, measures 42—49. — **Chopin**, Preludes Op. 28, No. 3; Nocturne, Op. 72, No. 1. —

406. The Figuration may, furthermore, be **transferred** from one Register to another. This usually takes place at the beginning of a new Phrase or Section; but is also possible from one Melodic Member to another, or from Measure to Measure (or even from Beat to Beat).

See **Mendelssohn**, S. w. W. Nos. 2, 5, 40; Prelude Op. 35, No. 1. — **Cramer**, Études, Nos. 15, 38, 79, 52, 53. — **Beethoven**, Var. Op. 120, Nos. 6, (26, 27). —

Hints and Directions.

407. The general requirements of a Figural part may be defined as follows: it should *flow smoothly* and naturally, and in regular, uninterrupted Rhythm (408 g); it should be *symmetrical* (408 b); it must produce a *complete* harmonic impression, at prominent points (401 b), and must **sound well.** — In detail, the following rules must be observed:

408. a. The figural Motive is defined by the **direction** and **rhythm** in which the Intervals succeed each other; not by the **size** of the intervals. The following figures all represent the **same Motive:**

Ex. 319.

*1) Any *characteristic* feature which the adopted Motive may contain should, however, be retained, — for instance, Inharmonic notes, or Repetitions. Hence, this last figure will not impress the ear as a parallel of the first one, to the degree in which the rest do, as they all contain the Repetition on the 2nd and 4th 𝅘𝅥𝅯-note, and consist entirely of harmonic notes. —

b. The Motive adopted for the Figuration at the outset, should be **retained** throughout the whole, or during a complete Section, of the piece, as strictly as the Harmony and Melody will permit. The following exceptions are allowed, and are very common:

1. The **contrary motion** of the Motive (Ex. 302, note *3) may be substituted;
2. **Fragments** of the Motive may be used, instead of the whole; or the direction of certain single intervals may be changed, in case the original Motive cannot conveniently be made to express the required Harmony. This is usually necessary at *shorter* Melody notes, or at more *rapid changes* in the Harmony:

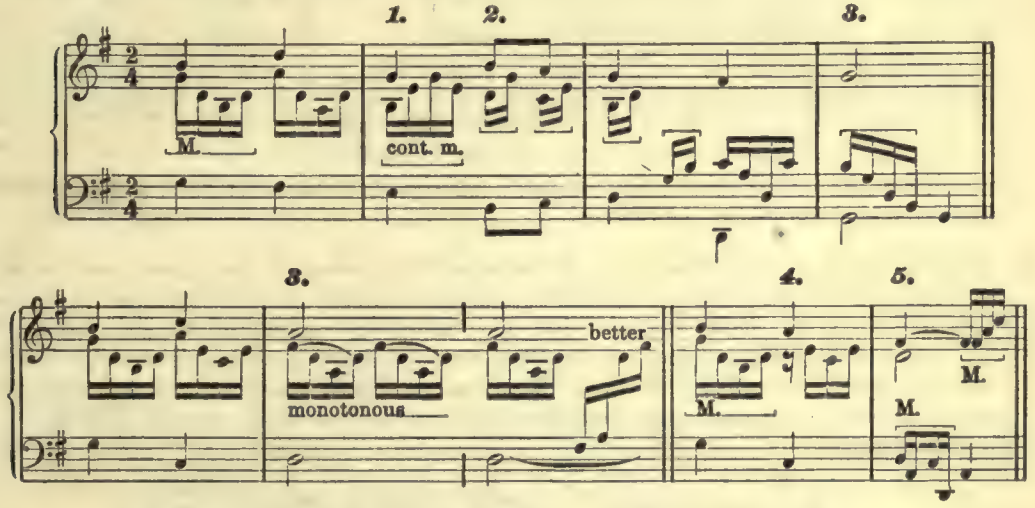
3. The motive may be ***entirely*** changed during melodic Cadences (and also at the Semicadences and Perfect Cadences); for the uniformity of the Figure is liable to become too conspicuous and monotonous at longer notes, or at pauses in the Melody;

4. A **Rest** may be substituted for the ***first*** note of the Motive, at any point, even if not a feature of the original Figure. Thus 𝄾 etc. Comp. 369 i;

5. The Motive may be changed upon ***altering the Register*** (406).

N. B. These changes should not affect the rhythm of the Motive: or, at most, but very exceptionally (see g). — For example.

Ex. 320.



c. It is next to impossible to define the qualifications of a "good Motive", — *experience* is the only teacher. *Long* Motives, especially when of *copious range*, are naturally more difficult to handle (entire) than shorter and narrower Motives. *Harmonic* Motives are generally more convenient than Melodic ones (409), especially when "Progressive Embellishment" is employed in the latter. "Local Embellishment", *i. e.* merely introducing *Neighboring-notes*, is very simple, and easy to treat.

d. According to 401 b, an open 5^{th} or 8^{ve} should not be used at prominent rhythmic points, excepting in rare cases where the 3^{rd} ***immediately*** (and rapidly) follows. Ex. 321 a.

e. It is forbidden to double sensitive tones and Chord-intervals (Leading-tone, Seventh etc.) at the Accents or on accented fractions of beats, ***although this may be done anywhere else***, especially in rapid tempo. Still, it is wise to avoid the duplication of the *Leading-tone*, wherever convenient. Ex. 321 b. — For illustration:

Ex. 321.

f. Parallel fifths or octaves must not occur between the Figural part and the other parts, ***in direct succession.*** When intercepted by at least ***two*** figural notes, they are generally unnoticeable. But much depends upon the rhythmic position of the intervals: if ***both*** occupy the accented (*i. e.* the ***first***) fraction of the beat, the parallels will be observed, even when ***more*** than two notes intervene. — Parallel 5^{ths} and 8^{ves} in oblique rhythm, between the different Intervals of the ***Figural part itself***, are never wrong, unless the harmonic progression is very irregular. — And ***intentional*** Octave-parallels are often extremely effective (See Appendix A, d). For illustration.

Mendelssohn, Op. 54, Var. 11.

Ex. 322.

g. The **Rhythm** of the Figural part ***must not be interrupted or changed at Rests, at the Cadences***, nor in the ***course*** of the Period. See 369, f.

h. The progression of the Leading-tone, Sevenths and Suspensions in the Figural part, is the same as in the Deferred Resolutions; that is, they are resolved where they ***first appeared.*** In exceptional cases (usually in the Middle Register) they are transferred to another octave, and resolved there. This is of the greatest importance in the **Bass** Register, where evaded Resolutions, and the like, lead to awkward inequalities. As a rule, the ***Groups*** or ***Figures*** should succeed each other with the same uniformity of register as the unbroken Chords themselves would. (See Ex. 323 b).

For example:

Ex. 323.

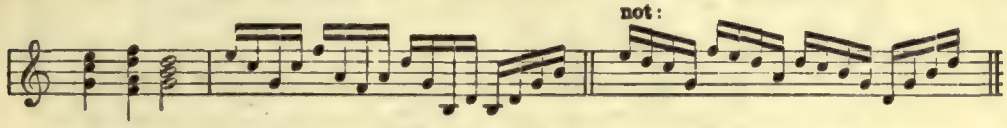
i. The Registers. When the Figuration is in the **Middle** Register, the Outer parts may, if necessary, be transferred to a higher and lower octave, so as to avoid embarrassing the Figural part. This may be done during ***any Member*** of either Melody or Bass, but always so as not to injure the connection. Comp. Ex. 316, measure 5 (Bass), measure 9 (Melody).

When the Figuration is in the **Lower** Register, embracing the original Bass part, care must be taken to ***preserve the effect*** of the latter, by using the separate Bass tones as ***lowest*** note of each Figural group, and generally, though not necessarily as ***first*** note also.

When the Figuration is in the **Upper** Register, embracing the original Melody, the same consideration is still more important than in the foregoing case, *i. e.* the separate tones of the Melody must be distinctly heard as ***uppermost*** (and almost always as ***first***) note of each Figural group, and their continuous connection with each other as "Melody", in distinction to the

accompanying lower tones of the "Harmony", must be made conspicuous by *isolating* them as much as convenient from the other (lower) tones of the Figural Motive; thus:

Ex. 324.



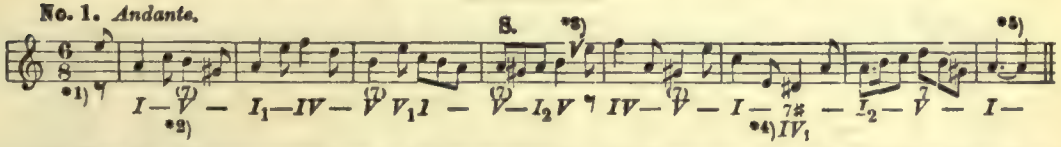
If, on the contrary, the Figuration in the upper Register does *not* embrace the Melody (405 c), care must be taken to keep it so subordinate in its melodic character, that it does not detract from the necessary superiority and prominence of the Melody proper.

j. It is important to recollect that whatever movements take place *within* the Motive, probably being only "Chord-repetition" (47), are not subject to any other regulations than that of 408 b, and of smooth progression in general. The critical moment is, always, where the *Chord changes*, *i. e.* generally from the last tone of one group to the first tone of the next. At this moment the same rules apply, and the same care must be taken, as in ordinary progressions, — especially in Bass (Comp. Ex. 323, b).

Exercise sixty-four.

Melodies, with given Bass, to be elaborated with *Harmonic Figuration* as indicated below

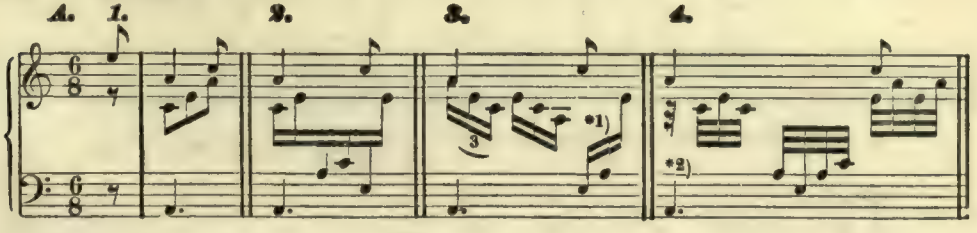
No. 1. *Andante.*

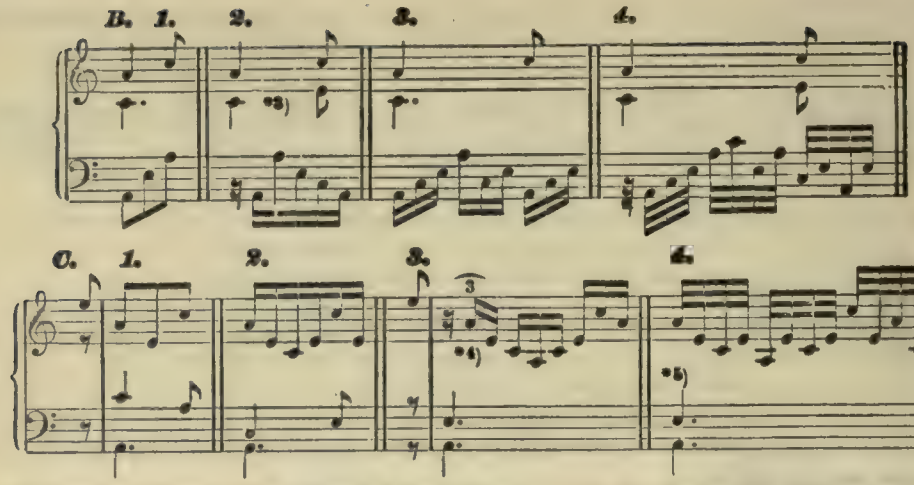


*1) This first Melody-note is not to be accompanied. — *2) The *Seventh* may be added to almost any Dominant Chord, in order to gain an Interval, or to avoid an open 8ve or 5th, if necessary. In general, *the given Bass (Harmony) is not strenuously insisted upon.* The pupil may make whatever alterations in the Chords, or even in the Key, his fancy suggests, or his adopted Motive may demand. — *3) Indicates the Semicadence. — *4) F♯ in Bass. — *5) The Figural part runs on to the 4th beat.

This Melody is to be supplied with a Figural part (3-part Harmony) in the *Middle, Lower* and *Upper Register in succession*, in a rhythm of 1, 2, 3 and 4 notes to a beat (♪, ♪♪, ♪♪♪, ♪♪♪♪) successively, according to 404, 405 a and 405 b, and with the following Motives, (each model to be worked out *complete*):

Ex. 325.





*1) Contrary Motion of the adopted 3-tone Motive. — *2) The Motive may embrace *any number of notes*, in the adopted rhythm. See 408 c). — *3) The object of the Middle part is, principally, to assist in completing the Harmony. Its progressions are quite optional, but should be as *quiet* as possible. — *4) The original Melody notes as highest but as *second* note of the Figural groups. — *5) Compare this Motive with C. 2, and see 402 and 367.

No. 2. *Andante cantabile.*

*1) The Figural part stops at the 2nd *beat*. —

To be elaborated similar to No. 1, with Motives of the pupil's own invention:

a) in the Middle Register (Figural rhythm ♪, 𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯 (3) and 𝅘𝅥𝅯𝅘𝅥𝅯 [also 𝅘𝅥𝅯𝅘𝅥𝅯 (6)]);

b) „ „ Lower „ „ „

d) in *Alternating* Registers (406) in 𝅘𝅥𝅯-notes, transferring the Figural part at discretion: say first after 4 measures, then again 4, then 2, and 2, and finally at each single measure;

e) in the *Uppermost* Register as Accompaniment (405 c) in a rhythm of 𝅘𝅥𝅯-notes, the Melody in *Tenor*, as follows:

Ex. 326.

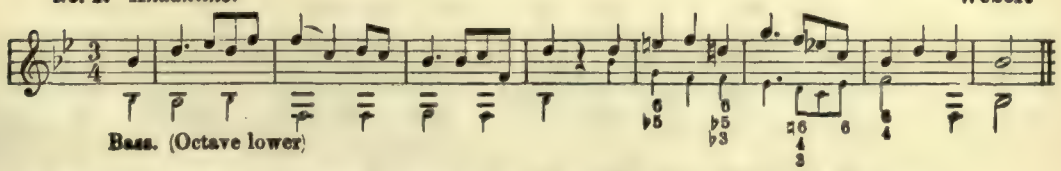
etc. (Motive of one whole measure).

No. 3. *Andante.*

Beethoven. E♭-Maj. Concerto.

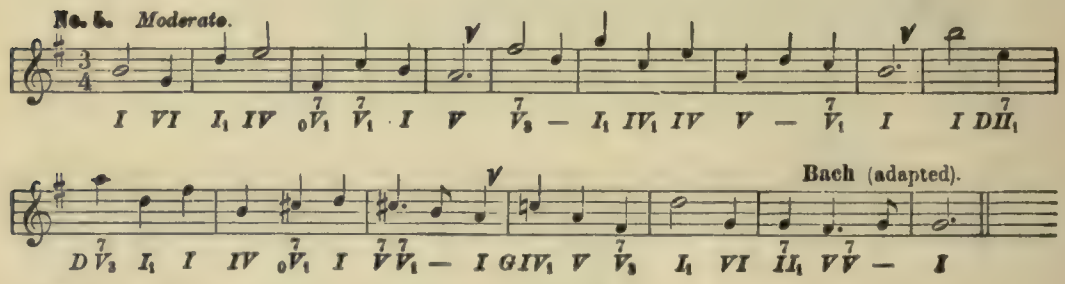
To be elaborated similar to No. 1, in the Middle, Lower, and Upper Registers, and in alternating Registers, in a rhythm of 3 and 4 notes to a beat (𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯 and 𝅘𝅥𝅯).

No. 4. *Andantino.* Weber.



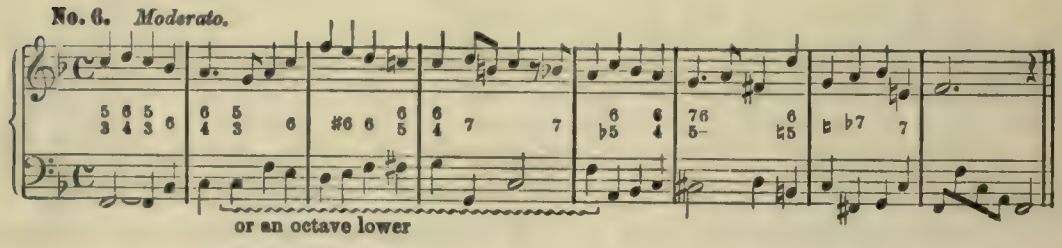
Similar to No. 3, in rhythms of 4 and 6 notes to a beat (𝅘𝅥𝅯 and 𝅘𝅥𝅯). For instance:

Ex. 827.

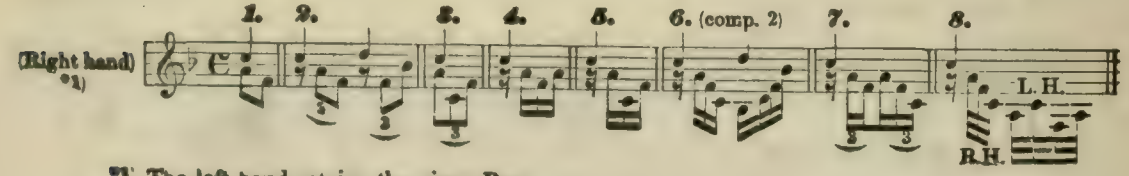

No. 5. Moderato.
I VI I₁ IV ₀V⁷₁ V⁷₁ I V V⁷₃ — I₁ IV₁ IV V — V⁷₁ I I DII⁷₁
Bach (adapted).
D V⁷₂ I₁ I IV ₀V⁷₁ I V⁷V⁷₁ — I GIV₁ V V⁷₃ I₁ VI II⁷₁ V⁷V⁷ — I

Similar to No. 3, in rhythms of 3 and 4 notes to a beat.

The following easy Period:



is to be elaborated with Harmonic Figuration **at the Piano**, at sight, in the following modes successively:



*1) The left hand retains the given Bass. —

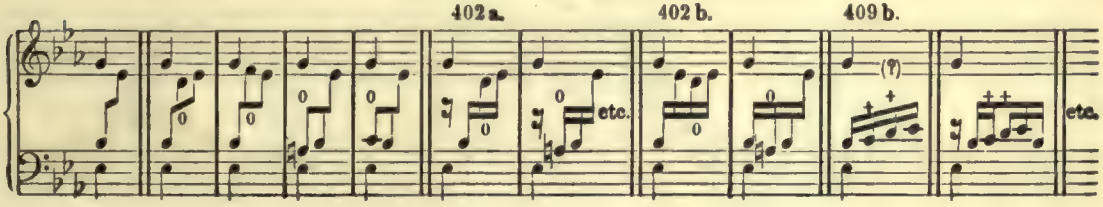
Mixed (or Melodic) Figuration.

409. a. Inharmonic notes may be interspersed between the harmonic tones, either *casually*, to facilitate the movement of the Figural part and aid in retaining the Motive; or *essentially*, as a feature of the Motive itself. In the former case the Figuration may be termed **Mixed**, in the latter case **Melodic**. See 400 a.

b. It is most convenient to use *simple Neighboring-notes* (Local Embellishment of any of the Principal-tones of the original Motive). *Passing-notes* are more smooth and more valuable, but embarrassing, because their use is dependent upon the size of the interval to be filled out. See 408 c.

Applied to Ex. 315, No. 2, according to 402, the result might be:

Ex. 328.



Exercise sixty-five.

A. Melody No. 1 of Exercise 64, to be elaborated with *Melodic or Mixed Figuration* according to the following models

And finally, two or three times in *alternating Registers*, in rhythms of 3 and 4 notes to a beat, with original Motives.

B. Melody No. 4 of Exercise 64, as follows:

And also, as above, in *alternating Registers*, with 4 and 6 (or 8) notes to a beat. —

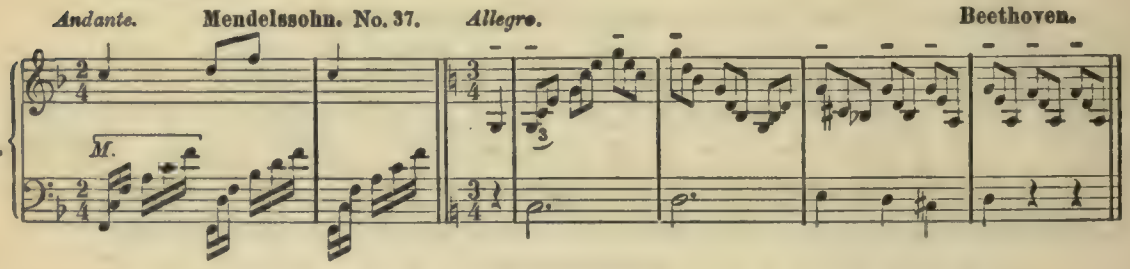
C. Melody No. 2 of Exercise 64, to be elaborated successively in the Middle, Lower and Upper Registers, and finally in alternating Registers, in optional rhythms, with original Motives, as above. —

Two-part Figuration.

410. In the absence of a Middle part, the number of parts is reduced to two (400**b**; **Ex.** 315—5), and greater care must be taken to avoid meagre intervals at prominent rhythmic points. The Motives are generally more copious, and more rapid, than in 3-part Figuration.

For example:

Ex. 329.



See also: **Mendelssohn**, S. w. W. Nos. 11, measures 1—8; 25, 31, 37; Prelude Op. 35, No. 1.
Cramer, Etudes 21, 24, 27, 31, 46, 62, 77.
Schumann, "Albumblätter" Op. 124, Nos. 6 and 16.
Chopin, Prelude Op. 28, No. 24; Nocturnes Op. 9, Nos. 1 and 3; Op. 27, Nos. 1 and 2; Op. 48, No. 2; Op. 55, No. 2.

Exercise sixty-six.

A. Melody No. 1 of Exercise 64, to be elaborated as follows:

B. Melody No. 2 of Exercise 64, to be elaborated in different varieties of 2-part Figuration, Harmonic or Melodic at option, in rhythms of (3) 4 and 6 (8) notes to a beat. —

C. Melody No. 5 of Exercise 64, to be elaborated in two-part *Harmonic* Figuration, in either Register, with 4 and 6 notes to a beat. —

D. Melody No. 6 of Exercise 64 to be elaborated at the Piano in the following ways:

One-part Figuration.

411. In this manner, all the parts together may finally be merged in one Figural-part (Ex. 315—6), embracing the original Melody and Bass as *highest* and *lowest* notes (but *not necessarily as first notes*) of each group.

The Motives are almost always copious, and rapid. The Figuration is apparently thrown from one Register to another uninterruptedly, or it consists of continuous groups, extending throughout the space included between the Melody and Bass. For example

Ex. 330.

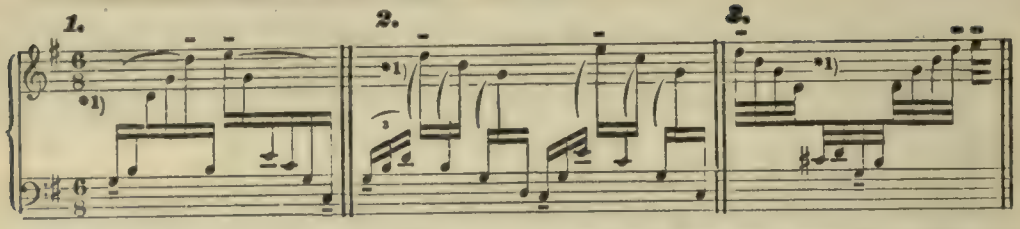
Czerny. Op. 740. No. 6.

See also No. 18 of this Collection of Czerny. —

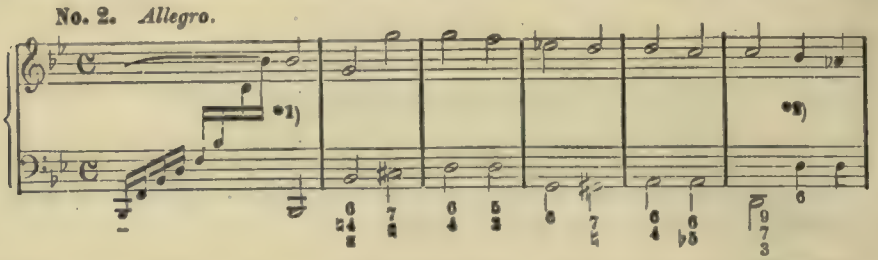
See Mendelssohn, Caprice Op. 33 No. 1, measures 1—6.
Cramer, Etude 33.

Exercise sixty-seven.

To be elaborated with one-part Figuration, as follows:



*1) The characteristic features of these Motives must be strictly adhered to! (Comp. Ex. 319, note *1). —



Händel.

*1) Continue in the simple manner indicated in the first half of the measure. — *2) The 2nd half of the Motive, twice. — This Exercise may also be made **at the Piano**, with other (original) Motives. —

No. 3. The 6th Melody of Exercise 64 is to be elaborated **at the Piano**, in the following ways:

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412. On the other hand, the Figural part may be accompanied by three or even more harmonic parts; in this case the Motive is likely to be shorter and more narrow than in three-part Figuration.

See Cramer: Etudes 10, 18, 25, 28, 36, 40, 56, 80, 82.
Mendelssohn: S. w. W. No. 11, second Part (*i. e.* after the 2nd Double-bar); No. 21. —

Irregular or Indefinite Part-writing.

413. a. In music of this kind the number of parts may be increased or decreased at option during certain sections of the piece, or at single points.

b. Casual or momentary additions may thus be made to the fundamental body of Harmony (2, 3 or 4-part as the case may be) for the purpose of avoiding meagre combinations, or in order to emphasize certain tones or Chords, or to heighten the effect of *crescendo* or *forte* passages. And, on the other hand, the number of original parts may be reduced for the sake of *diminuendo* or *piano*, or for any other desired variety of expression and effect.

c. But these alterations in the volume of Harmony should always be accomplished in such a manner as not to disturb the flow of the original (fundamental) parts, or *entirely destroy the impression of* individual part-progression (or voice-lines), so indispensable in good Harmony. Hence, when a fundamental part is temporarily omitted, it is advisable, though not necessary, to introduce Rests in its stead, as a means of keeping its trace. And additions should create the impression of a single fundamental part *separating into two or more tone-lines* for the time being, and ultimately converging again to the original single part. For illustration·

Ex 831.

*1) An example of *3-part* Harmony, reduced at first by partial Rests to 1 part. — *2) Here all 3 parts appear, bu. the 2 upper parts are *stroked together* on one stem. — *3) Reduced to 2 parts, but without Rests. In the next measure again 3 parts. — *4) Four parts. — *5) Here a *momentary addition* which equals 5 parts. — *6) Again 4 parts, the 3 upper ones stroked together. — *7) Fundamentally 4 parts; increased here to 5. — *8) Decreased to 3 parts for *one beat*. — *9) Intentional Octaves in the upper parts. — *10) The Rests only suffice for two parts. The Harmony is here reduced to 3 parts. — *11) Here (and in the next 2—3 measures) again 4 parts. — *12) Fundamentally 4 parts, increased by intentional octaves in Tenor to 5 parts. — *13) On the first beat of this measure the Harmony is reduced to 3 parts, immediately afterwards increased to *six!* — *14) Here increased to *eight* for a moment, on account of the *crescendo* and *forte*. — *15 Here again 4. — *16) Four parts. — *17) Increased in Alto to 5, and immediately afterwards reduced to 2, and then 1, with partial Rests. — *18) At this *single point* 6 parts, and then 3. —

414. Such *supplementary notes or parts* can only be employed in music for *Manual* instruments (Piano-forte, Organ, etc.). In Vocal music, or in music for Wind instruments, where it is impossible to produce simultaneous tones, the only change that can be effected in the volume of tone, is a *decrease* in the number of parts, either by the introduction of Rests, or by intentional Octaves or Unisons (see Appendix A, d). —

See also: **Bach,** Well-tempered Clavichord, Book I, Prelude 22 (*B*-minor).
Mendelssohn, S. w. W. No. 2, measures 2, 3; No. 11, measures 8, 9, 11, 12(1); 16(1); 17; 20(1). —

On the contrary, in **Beethoven,** Sonata Op. 14, No. 2, 2nd movement (Andante) the fundamental 4 parts are retained throughout the Theme, with but very few additions and reductions. —

Figural Motives with Supplementary tones.

415. a. Upon this same principle, Figural Motives may be made, in which certain Intervals are furnished with one or more harmonic supplementary tones (or twin-notes, as they might be called).

b. The twin-notes should occur as a rule at the *corresponding place* in each Group (comp. Ex. 319, note *1). Still, quite unique effects are sometimes produced by an irregular disposition of the supplementary tones. For illustration:

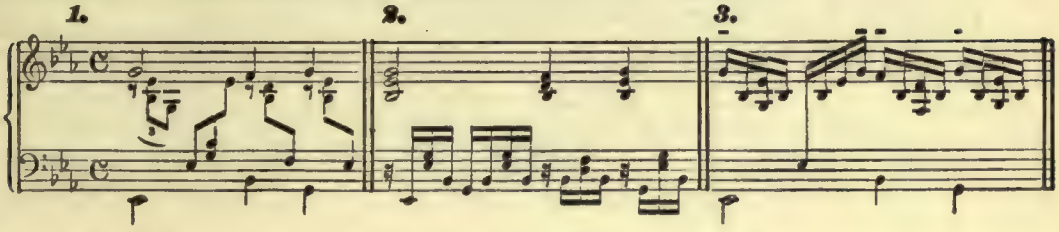
Ex. 332.

*1) The twin-notes occupy *different* places in the groups. — In Nos. 1 and 2 they are regular. —

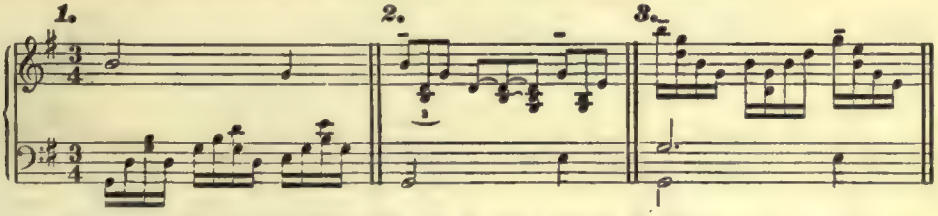
See **Mendelssohn,** S. w. W. Nos. 6, 12, 13, 29.
Cramer, Etudes 17, 58, 60, 76, 78.
Chopin, Ballade Op. 38, 2nd part; Nocturnes Op. 9 No. 2, Op. 15 Nos. 2 and 3, Op. 32 No. 2 and Op. 48 No. 1; Etudes Op. 25 Nos. 3, 4, 5 especially the middle Section), 9. —
Beethoven, Sonate Op. 2 No. 3, last movement, measures 29 etc. —
Henselt, Etudes Op. 5 No. 2, No. 10 (middle Section). —

Exercise sixty-eight.

A. Melody No. 3 of Exercise 64, to be elaborated with the following Motives.



B. Melody No. 5 of Exercise 64, to be elaborated with the following Motives:



To this the Scholar may add an elaboration with original Motives, in *alternating Registers*. —

Rhythmic Figuration.

416. When the Figural Motive consists entirely, or in part, of *repeated notes*, the Figuration may be termed **Rhythmic**, in distinction to pure **Harmonic**, or **Melodic** Figuration (400 a). In such cases the casual (or constant) enlargement of the Motive, by means of supplementary notes, is more natural and necessary than in the other species of Figuration. For example

Ex. 333.

*1) Rhythmic Figuration is very frequently *syncopated*, as here. —

See also: **Mendelssohn**, S. w. W. Nos. 10, 14, 20, 26, 39, 8, 22, 27, 33, 24 (I) 36 (I). — Op. 54, Var. 12. — Op. 82, Var. 3. —
Cramer, Etude 52.
Chopin, Nocturne Op. 15 No. 1; Prelude Op. 28 Nos. 17 and 15. —
Beethoven, Sonata Op. 22, second mov't; Op. 7, first 4 measures; Op. 14 No. 1, first mov't, last 15 meas. —
Henselt. Etudes Op. 5, Nos. 1 (2nd Part), 3 and 5. —

417. The reason for designating this species "Rhythmic" Figuration is very plain. Not the Chords themselves, but the "Rhythm", is broken. — The "Motives" in rhythmic Figuration, (if they may be so called), are all exactly or nearly alike in form. The difference lies in the *effect* the various styles produce, and this depends solely upon the rapidity of the reiterations, *i. e.*, upon the **Tempo** of the rhythmic figure. Compare, for instance, Mendelssohn's Song without Words No. 10, with No. 22. —

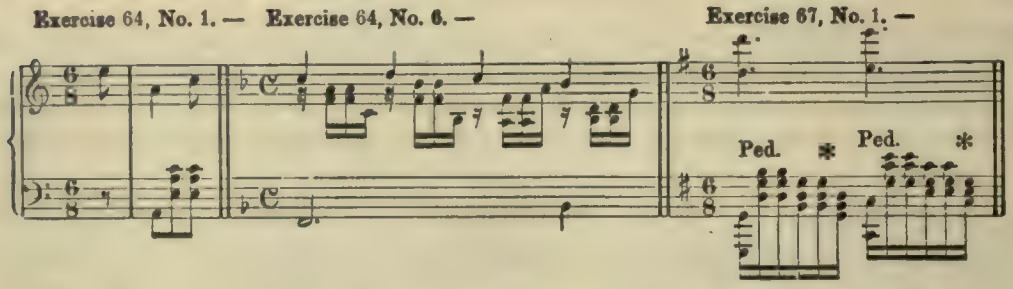
With what striking effect Rhythmic Figuration *in slow tempo* may be used (especially in the low Registers) will be seen in **Bach**, St. Matthew-Passion, last "Basso-Recitativo" in the 2nd part (Edition Peters, pages 145, 146); second Alto Aria in the 2nd part (pages 92 etc.); Well-tempered Clavichord, Book I, Preludes 8, 22; Book II, Prelude 3. — **Brahms**, 1st Symphony (*C*-minor), Introduction to 1st movement. —

In rapid tempo: **Rubinstein**, Etude, Op. 23 No. 2; **Wagner**, "Flying Dutchman", closing Chorus in No. 4 (2nd Act). — *In moderate tempo:* **Beethoven**, 8th Sym., *Allegretto scherzando.*

Exercise sixty-nine.

A. Melody No. 4 of Exercise 64, to be elaborated as follows:

B. Elaborate the following models **at the Piano:**



Double, Compound and Complex Figuration.

418. In Double Figuration there are two Figural parts (usually representing *adjacent* voices, but sometimes separated by one or more harmonic parts), which operate *in concert* throughout the whole, or certain Sections of the piece, and employ the *same* Motive, or *different* Motives. This mode of employing *simultaneous* Figural parts must not be confounded with *alternating* Registers, which it may sometimes resemble in effect, but from which it always essentially differs.

See 406; and compare Exercise 66, A, No. 3, and D, No. 3. — Also Mendelssohn, Prelude Op. 35, No. 1. —

419. The distinction between Double, Compound and Complex Figuration is as follows:

Double, when the Melody and Rhythm of the figural motives are alike, the Figural parts generally running parallel, as ***simple duplication*** in 3rds or 6ths (on an average);

Compound, when the Rhythm of the Motives is the same, but the ***Melody*** (***direction***) ***different***,

Complex, when the ***Rhythms are different***. For example:

Ex. 334.

Of these three varieties of duplicated Figuration, the "Complex" is no doubt the most common and favorable. Compare 369 k. — There is no rule as to which Register should assume the more active of the two different rhythms, although possibly the *quieter* Figures are more appropriate in the *lower* Registers. — See also:

Double Figuration: **Mendelssohn, S. w. W. Nos. 7, 32, 42;**
Cramer, Etudes 7, 19, 20, 22, 35 (at times compound) 48, 50, 54, 61, 63, 73, 81, 83
Chopin, Prelude Op. 28, No. 14 (!); Etude Op. 25 No. 12;
Beethoven, Sonata Op. 7, third mov't, "Minore". —

Compound Figuration: **Cramer,** Etudes 42, 59, 65;
Chopin, Preludes Op. 28, Nos. 2, 5, 11, 19, 21; Etude Op. 25 No. 1. —

Complex Figuration: **Mendelssohn,** S. w. W. No. 13, (24);
Cramer, Etudes 5, 8, 21, 31, 36, 38, 46, 79;
Chopin, Prelude No. 8; Etudes Op. 25 Nos. 2, 9. — Etudes for the "Moscheles-Method", Nos. 1 and 2. — Fantasie-impromptu Op. 66. —

Triple and Quadruple Figuration.

420. Triple or Quadruple Figuration is of comparatively rare occurrence in Piano-forte music, but not uncommon in Orchestral or Chamber music. For illustration:

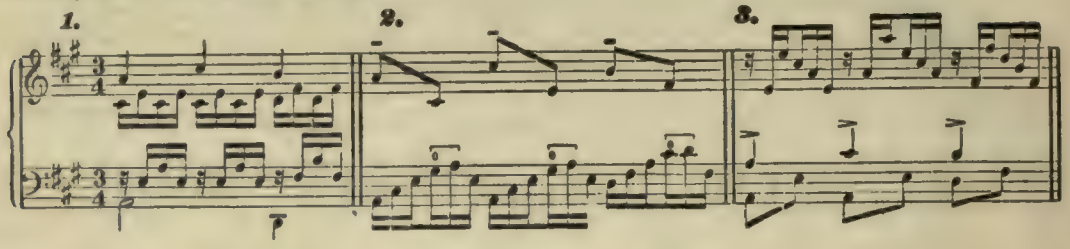
Ex. 335.

*1) Melodic Fig. in the upper part, Harmonic Fig. in the middle and lower parts. —

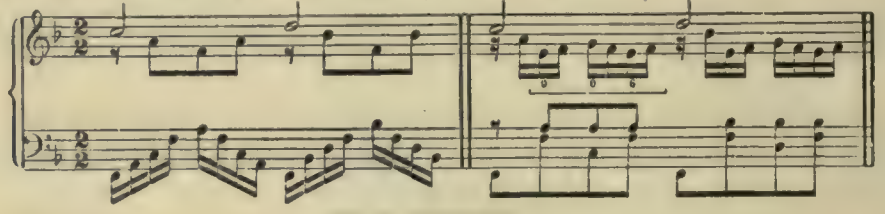
See **Chopin:** Etudes Op. 25 Nos. 3, 6, and 8. —
Etudes for the "Moscheles-Method", No. 3. — **Cramer,** Etude 29, 70. —

Exercise seventy.

A. Melody No. 2 of Exercise 64, as follows:

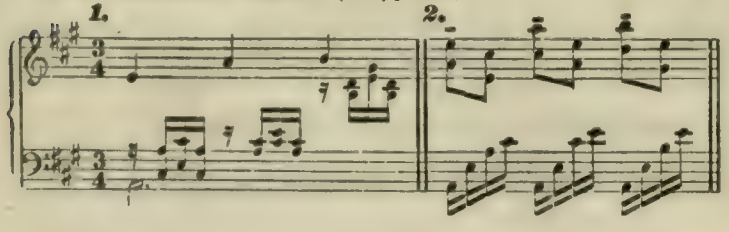


B. Melody No. 6 of Exercise 64, in $^2/_2$ time (instead of C), as follows:



C.

To be elaborated as follows (in $^3/_4$ time):



And in a number of other ways, with original Motives.

D. Melody No. 1 of Exercise 67 (in C-time instead of $\frac{6}{8}$) as follows:

E. Melody No. 6 of Exercise 64, **at the Piano,** as follows:

Appendix A, d.

In conclusion, the scholar is to apply each of the different varieties of Figuration, independently. For this purpose, any Original Phrases or Periods made during the course of Parts II and III, or any familiar sacred or secular Air, may be utilized. Or, best of all, he is urged to make thorough use of the following section upon Paraphrasing (421).

Paraphrasing, or simple Variation.

421. By "paraphrasing" is meant, the elaboration of a given theme (8–16 measures) after the manner of *very simple variations*, without altering any *essential* feature of the theme, but only the *style*. The best illustrations will be found in **Mozart,** Pianoforte Sonata XII (Cotta edition, Book I, p. 155, 2nd movement); in the Chaconnes of **Haendel;** and in the simpler variations of **Beethoven** (e. g.: 13 Variations in A, Peters edition, p. 120; 9 Var. in C-minor; 6 Var. in F-major; 9 Var. in A; 8 Var. in C; etc.) **These very themes may be utilized,** before being analysed.

Leading points and suggestions: 1. The Rhythm; (elaboration in a rhythm of 2, 3 or 4 notes to an original beat).—2. Location of the rhythmic figure; (figural Sopr., or Bass, or inner part; alternating parts; running voice).—3. The Melody preserved intact and the Harmony changed, or *vice versâ*.—4. The register of the Melody; (melody transferred to a higher or lower octave, or to another voice; transferred entire, or in sections).—5. Change of mode (major to minor, or *vice versâ*).—6. Change of rhythm or Time, from duple to triple, or *vice versâ;* (this should be done rarely and with caution, as it is apt to alter essential traits of the theme).

Appendix A. Parallel 5ths and 8ves.

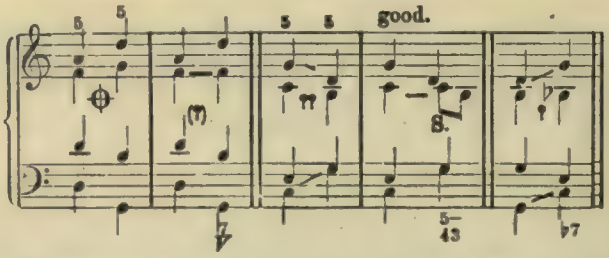
a. The unpleasant effect produced by a succession of perfect fifths in parallel direction may be accounted for in the following two ways:

Firstly, the perfect fifth, being the most perfect harmonic relationship of two tones to each other (23), represents a harmonic body of such absolute completeness and distinct individuality, that it can not connect and interlink with another body of corresponding distinctness. Hence, when perfect fifths appear in direct succession, the necessary intermediation is lacking.

Secondly, the weak, unsatisfactory *quality* of the Fifth as Chord-Interval (defined in 49 c and corroborated in numberless subsequent examples) is in a very great measure to be regarded as the cause. If one Fifth alone is unsatisfying, the effect of two or more in immediate succession must naturally be sensibly disappointing.

b. The degree in which this disagreeable effect is produced is proportionate to the prominence of the Fifths. Therefore they are most painful when they progress parallel with their *Roots*, as actual and most palpable "Fifths" (hence the common designation, *parallel* Fifths): or when the succession of Fifths lies in the Soprano (successive Positions of the 5th, 59 b), or in Bass (successive $^6/_4$ Chords, 142 b. But they are also qualified according to the relationship of the Chords in which they occur, Fifths between *foreign* Chords sounding worst; and they may be ameliorated by many circumstances: as, for instance, *when the second Chord is an Inversion*, in which case the Fifth in an upper part sounds more like a Third or Octave (Ex. 93, *2); and *when in contrary motion.* For example:

c. Other devices may be resorted to, for the amelioration of their unpleasant effect, as follows:
When a *Dissonance* is added to the second Chord, the attention is partly distracted from the consecutive Fifths:



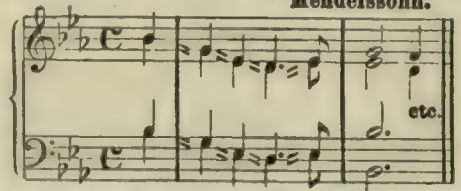
When one of the 5ths represents *some other Interval* of the Chord than the Fifth itself (*e. g.* the Seventh or Ninth), the disagreeable effect is in a measure removed, because the Seventh or Ninth, although weak, is not nearly as vapid and "flat" as the Fifth (49 c). This is also true of the *diminished* 5th.

Finally, the evil is entirely removed when the second 5th is *not Harmonic* (369 e).

---

d. In regard to **parallel Octaves**, and their occasional admissibility, the following explanation will suffice. Should the succession of Octaves or Unisons be extended *during a distinct section of the harmonic or melodic progression*, for the obvious purpose of strengthening and supporting a part by duplication, it would be justifiable, and might be very appropriate and effective; but the 4-part harmony would thereby be reduced to 3 or less parts.

Mendelssohn.



See Ex. 264 No. 1; Ex. 275 b; Ex. 277—3; Ex. 278 c; Ex. 295—2. — Handel, Six petites Fugues, No. 4, measures 39, 40; 43, 44; 47, 48; 51, 52. — **Bach,** Well-tempered Clavichord, Book I, Fugue 10, measures 19, 20; 38, 39. — **Mendelssohn,** S. w. W. No. 11, meas. 1—8; No. 5, meas. 23—27; No. 18, meas. 20—13 *from the end:* No. 23, throughout the principal Parts. —

Appendix B. The Grades of Harmonic Progression.

Harmonic progression is simply an *exchange* of harmonic impressions. The force of the sensations produced upon the ear and mind by the different varieties and degrees of change, is proportionate to the *difference in construction*, and consequent *difference in effect*, between immediately succeeding Harmonic bodies; therefore, practically considered, Harmonic Progressions may be classified according to the degree of similarity between the Chords (in reference to their component tones).

a. The **First Grade** of harmonic progression is the simple **Repetition** of a Chord (*all* the tones common). No new tones are acquired, and the impression conveyed is rather that of Repose than of Advancement; the only Element engaged is Rhythm. Ex. 44.

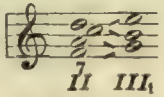
b. In the **Second Grade**, *one or two new tones* are acquired, and two or three are common. The Root of the first Chord changes its location by a 3rd, upward or downward. Exs. 76, 82, 85, 86—1, 2. —

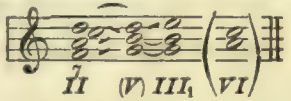
c. In the **Third Grade** there is *one common tone*. The Root of the first Chord generally changes its location by a 5th, upward or downward. — This Grade includes the Normal Progression and its reverse, and is the most natural and gratifying succession in music, — as comparison with the other Grades clearly shows. In this stage, harmonic progression reaches the highest degree of vigor and perfection; the change is striking and sufficient, but the dangers of disconnectedness, etc., which attend the progressions of the Fourth Grade, (**d**) are averted by the one common tone, which serves as a connecting-link. If the First Grade be excluded from the *actual* progressions (as is a correct assumption), the Third Grade represents the mean between the Second and Fourth Grades, in which the changes are respectively too inconsiderable, and too great. Exs. 47 etc.; Exs. 62 etc. —

d. In the **Fourth Grade** of harmonic progression there is *no common tone*, and consequently the Chords are entirely foreign to each other. (Ex. 67). The Root is transferred to the *next* higher or lower step; or, more properly, a 9th (= two 5ths, or four 3rds). For illustration:

The difficulties and dangers of harmonic progressions or "exchanges" increase *in proportion to the number of new tones acquired: i. e.* according to the Grades of progression, as here defined. While it is almost impossible to make an error in the First Grade (Repetition: see 47), the greatest care must be exercised in the treatment of the Fourth Grade (Foreign Progression: see 79, Ex. 74 etc.).

Appendix C. Condensed (or Compound) Chord-progressions.

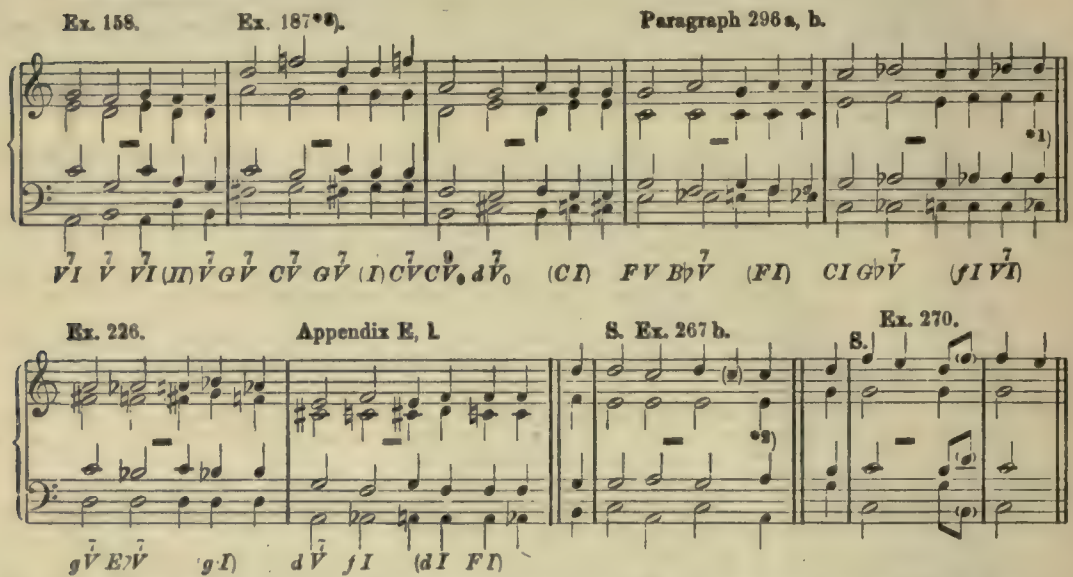
The great majority of Irregular harmonic progressions may be easily accounted for, and sufficiently justified, upon the grounds of *simultaneous* part-progression, where *successive* movements were expected, and demanded, according to the natural laws of harmonic succession. For instance, the following irregular *single* Chord-progression: 

is obviously only a *condensed form* of the following *double-progression:* 

An investigation of the wide range of possibilities which this peculiar mode of treatment opens, would extend far beyond the limits of this book, and it is therefore simply brought to the Scholar's notice at this point, and left to his own research, — with a warning reference to footnote *10) of Appendix E, and to Appendix G. — The justification of such condensed Chord-progressions is often a very difficult matter, and must

generally be referred to the *ear alone*, which, *when well trained*, is a sufficient guide. Usually, but not regularly, the Chord which *follows* a condensed Chord-progression will be one which either of the component Chords could reach alone: see the VI, with which the above example terminates. Furthermore, the condensed progression should not embrace more than two or, at most, three ordinary successions. —

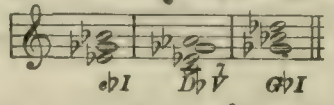
Further illustrations:



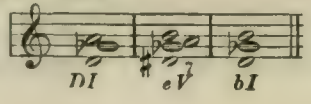
*1) *All* examples of Compound chromatic or enharmonic Chord-progression belong to this class. —
*2) All these irregular "Deferred" Resolutions of the Suspension are also Condensed Chord-successions. —

Appendix D. The Enharmonic Change.

The dotted lines in Ex. 206, which indicate the *actual* successive arrangement of Key-notes (or Tones in general in the Harmonic System, can be prolonged in both directions parallel with the other lines, completely around the Circle, again and again. The ultimate result will be a scroll, commencing at the centre and running on outward into infinite space. The modern Tone-system obviates the infinitely repeated Enharmonic discrepancy, by limiting itself to one single circuit of 12 Harmonic Degrees, which is rendered complete (*i. e.* perfectly *round*, instead of *spiral* by the Enharmonic adjustment at $F\sharp$ and $G\flat$, — directly opposite the adopted starting-point *C*. This adjustment is not effected by simply substituting $F\sharp$ for $G\flat$, or *vice versâ*, for this exchange is not admissible, on account of the difference which actually exists between these tones, and which is palpable enough even to a comparatively untrained ear. The means resorted to, upon which the system of "Equalized temperament" is based is, to adopt *neither the one nor the other* of these tones ($f\sharp$, $g\flat$), but a tone (so strangely foreign to the accepted System of Keys that is would be difficult to define it) **which lies exactly in the middle between the two,** *and, thus dividing the originally small enharmonic difference into two infinitesimal parts which are indiscernible by the ear*, **answers perfectly well for both.** For illustration: if the corresponding black key of the Piano-forte were tuned *exactly* $G\flat$, it would only be applicable in those Chords and Keys which contain *this tone* and *not* $F\sharp$:



because in such Chords and Keys as require $F\sharp$ it would sound out of tune. Thus:



On the other hand, if

this same black key were to be tuned *exactly* $F\sharp$, it would suit the *second* set of Chords given above:

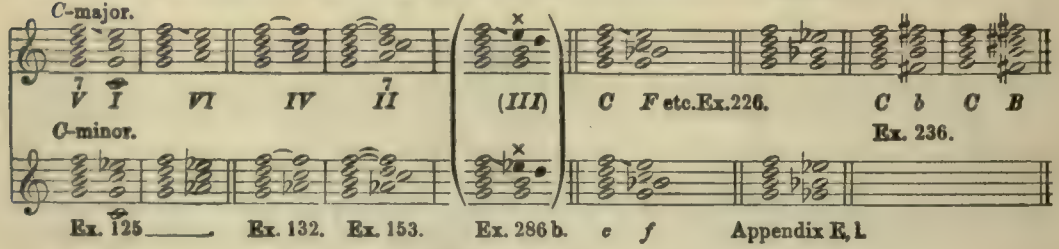
but would be disagreeably anomalous to the first set. The intermediate tone obtained by the present mode of "Equal temperament" agrees, however, sufficiently well with *both* sets. — Formerly, before the Equal temperament was recognized and adopted, the instruments were tuned in *absolutely perfect* fifths, so that at the end of 12 such fifths the enharmonic discrepancy (technically known as the "wolf") was fully developed. In the Equal temperament this discrepancy is distributed in equal parts among the 12 Key-notes, so that each fifth is a *trifle smaller* than if perfect ('$f\sharp$ being a little *lower* than $g\flat$, about in the proportion 167 : 171), and the Circle of tones, as demonstrated above, becomes perfectly round. The difference, though inconceivably small near the starting-point (say C), becomes greater with each succeeding fifth; consequently the Composers in olden times were obliged to limit themselves to Keys in the vicinity of *C*-Major. These, being perfectly true, were purer than the modern Keys, but this slight advantage is more than counterbalanced by the present possibility of using *all* the Keys, in unlimited conjunction and alternation. This also explains the quaint title of J. Sebastian Bach's 48 Fugues and Preludes for the "Well-tempered Clavichord": Being a strong advocate of the new system of Equal temperament, he wrote both volumes of this work *in all of the 24 Major and Minor Keys*, which, as above shown, could only be obtained upon a "Well- (or equally) tuned" instrument. —

Appendix E. Exceptional Progressions.

*1) Ascending 6th step. — *2) Descending Leading-tone. — *3) Ascending 6th step. — *4) Descending Leading-tone. — *5) Ascending Dominant-Seventh. — *6) Six-four Chord entering with a skip. — *7) Successive $^6/_4$ Chords. — *8) Skip *from* a $^6/_4$ Chord. — *9) Peculiar resolution of a $\overset{7}{V}$ into a foreign I. — *10) The scholar is strenuously warned against imitating such fantastical and adventurous harmonic successions as these last two Examples of **Wagner.** They are noted down here as interesting illustrations of what a highly imaginative mind has succeeded in extorting from the natural resources of tone-combination and progression, with a tolerable show of plausibility. Their influence upon the *beginner* is undeniably pernicious. Compare Appendix G.

Appendix F.

Summary of the progressions which the Chord of the Dominant-Seventh can make.



Appendix G. Concluding remark.

The chief and deplorably common error in modern Composition is the inclination to employ eccentric and complex harmonies, in endless succession, without relaxation or rest, and with studied evasion of vulgar "Resolutions"; partly in obedience to the Spirit of the Age, and partly in the ambition of producing something "Original". The Composer who leads his auditor through a perfect labyrinth of harmonic by-ways, adding Suspensions (Irregular, of course) to every single succession, and fitting out the whole with an Organ-point, dare not wonder when his work is pronounced incomprehensible and unenjoyable. This truth cannot be too early and deeply impressed upon the scholar's mind; and he is warmly recommended to adopt **Haydn, Mozart** and **Beethoven** as his models, in preference to such adventurous explorers as **Schumann, Chopin** etc. etc., — at least until he has *finished his studies*, and is prepared to assume an individuality of his own. Not that the Author wishes to be understood as depreciating the real value of these more modern Masters' works. Their significance in the progress and history of music, and their agency in unfolding a new world of tone-beauty, is unquestioned; but they are not the proper source from which the *Scholar* is to expect natural and healthy development. —

THE END.

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